Curriculum Vitæ

Giovanni Squillero

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Biosketch (350 words)

Giovanni Squillero works as a full professor of computer science at Politecnico di Torino, Department of Control and Computer Engineering. His research combines artificial intelligence and soft computing, in particular bio-inspired meta-heuristics, multi-agent systems, and approximate optimization. The industrial applications of his work range from electronic CAD to bioinformatics, to the cultural sector. As of October 2025, he is credited as an author in 3 books, 44 journal articles, 11 book chapters, and 153 papers in conference proceedings; he is also listed as an editor in 16 volumes. As an entrepreneur, he co-founded *Ominee*, S.r.l. in 2014, *Bactell*, Inc. in 2019, and *Ai·Culture*, S.r.l. in 2024.

Squillero has been an *IEEE Senior Member* since 2014; currently he serves on the technical committee of the *IEEE Computational Intelligence Society Games* and on the editorial board of *Genetic Programming and Evolvable Machines*. He was the program chair of the *European Conference on the Applications of Evolutionary Computation* in 2016 and 2017, and he is now a member of the steering committee of *EvoApplications*. In 2024 he co-organized *GGP*, the workshop on *Graph Genetic Programming* at GECCO; in 2018, *EvoML*, the workshop on *Evolutionary Machine Learning* at PPSN; in 2016 and 2017, *MPDEA*, the workshop on *Measuring and Promoting Diversity in Evolutionary Algorithms* at GECCO; and from 2004 to 2014, *EvoHOT*, the *Workshops on Evolutionary Hardware Optimization Techniques*.

Since 1998, Squillero has lectured 85 university courses (19 phd, 6 ms, 60 bs; 48 in English, 37 in Italian); he has contributed to another 39 courses as an assistant or in other ancillary roles. He has presented 14 tutorials (13 in top conferences); he has been invited to give 1 keynote and 5 talks (2 in national events). Squillero also contributes to various open source projects and regularly publishes his research and teaching materials on GitHub.

On a more playful note, after coaching the team that won the bronze medal at SWERC17, Squillero helped creating CPPolito, Politecnico's student team for competitive programming. Then, in 2022, he assisted the establishment of Scacchi PoliTO, the student organization for promoting chess-related activities, where he continues to serve as an advisor.

Main research topics

Squillero's research is more easily defined by the methodologies he used than by the problems he tackled. In the 1990s he started working with *genetic algorithms*, and in subsequent years the research broadened to evolutionary algorithms in general and up to the whole spectrum of bio-inspired metaheuristics and soft-computing; approaches classifiable as *artificial intelligence* have been exploited since the 2000s; classifiable as *machine learning*, since the 2010s. Topics related to *approximate optimization*, such as, parallelization, ad-hoc heuristics, surrogate models, and problem-specific simplifications, have also been studied since late 1990s.

In more details, among the currently active research lines it might be worth mentioning:

- **Bioinformatics**: The study of computational intelligence techniques to forecast antibiotic resistance from microbial whole genome sequencing started in 2019; to determine the presence of COVID infections from breath analysis by mass spectrometry, in 2021.
- **Estimation of distribution algorithms**: The research started in 1998 by developing the SG (Selfish Gene), an evolutionary algorithm based on a controversial interpretation of natural selection, soon after it focused on solving deceptive problems with EDAs.

- **Games and intelligent behaviors**: The line started in 2006 tackling the "Core War" game. Since the 2010s, the research includes the modeling of players, either to predict the opponent's moves during a game, or to recreate the *personality* of a human.

While among the discontinued ones, one could remember:

- **Promotion of diversity in artificial environments**: The research started in the 2010s and aims at evaluating, understanding, and possibly mitigating the endemic lack of diversity in evolutionary computation.
- **Security and Malware**: The research started in mid 2010s, and aims at building scalable, fully-automatic or semi-supervised tools able to handle massive datasets of malware applications.
- **Automatic generation of full-fledged assembly programs**: The research started around 2000 with the goal to create test programs for microprocessors and microcontrollers, and the activity got a (partial) support from Intel under the grant: "GP Based Test Program generation". It eventually led to the development of a general-purpose toolkit named µGP (MicroGP), freely available through Sourceforge at `http://ugp3.sf.net/` and under active development.
- **Routing and security in wireless sensors' networks**: The research started in the 2010s and was backed by WSN experts. It aims at exploiting evolutionary algorithms for quite unusual goals.
- **Drift corrections in electronic noses**: The research started in the 2010s and was backed by experts in both electronic sensing and in classifier systems. It aimed at developing an adaptive system able to mitigate the effects of drift and other irreversible phenomena.
- **Generation of input stimuli for testing, and validation**: In the 1990s the research focused on gate-level digital circuits, then, it moved to higher levels of abstractions (register-transfer, behavioral). Since the 2010s, the physical devices were used directly without simulation. The line of research also tackles generic complex systems, like software applications on cellular phones.
- **Web interfaces, distant learning, artificial intelligence for web applications**: The research, almost discontinued in the 1990s, aimed at helping users with special needs.

Appointments

Politecnico di Torino

- **Full Professor** — Department of Control and Computer Engineering [from 2024]
- **Member** — Joint Committee on Teaching (a.k.a., Comitato Paritetico per la Didattica, CPD) [from 2024]
- **Member** — Specializing Master's Programmes and Lifelong Learning School [2022-2025]
- **Member** — Ph.D. Steering Committee (Pure and Applied Mathematics) [from 2023/24]
- **Member** — SmartData@PoliTO (interdepartmental center) [from 2021]
- **Advisor** — Scacchi PoliTO (student team) [from 2022]

National (Italy)

- **Member** — CINI's Working Group on Soft Computing [from 2023]

Professional Bodies and Learned Societies

- **Senior Member** — Institute of Electrical and Electronics Engineers [from 2014]
- **Member** — Games Technical Committee (IEEE Computational Intelligence Society) [from 2010]
- **Member** — International Council of Museums [from 2025]

Editorships

- **Editorial Board Member** — Genetic Programming and Evolvable Machines [from 2012]

Editorships

- **Editorial Board Member** of *Genetic Programming and Evolvable Machines*

Scientific responsibilities

Research projects (competitive calls)

- *ART-IFICIAL INTELLIGENCE in Support of Museums* as **Head of the Department Unit** for DAUIN, grant from *Compagnia di San Paolo* (1 M€, 2020-2022)
- *SG - SMART GAMER*, grant from *Poli di Innovazione* (2013-2014)

Research projects (commercial contracts)

- "COLIBRI #2" with *SPEA S.p.A.* (2020-2022)
- "Extraction and identification of information from mass spectra" with *Nanotech Analysis S.r.l.* (2021-2022)
- "A3G speed monitor modelling" with *Infineon Technologies Italia S.r.l.* (2021)
- "Machine Learning techniques for virtual antimicrobial susceptibility testing" with *Bactell Inc.* (2019)
- "Machine Learning techniques for the prediction of failures based on in-situ sensors values" with *Infineon Technologies A.G.* (2018)
- "Algoritmo di ottimizzazione" with *Seica S.p.A.* (2017)
- "Ottimizzazione percorsi FP" with *SPEA S.p.A.* (2011)

Organizing Committees

- **Organizer** of the Workshop on *Graph Genetic Algorithm* at the *Genetic and Evolutionary Computation Conference* (GECCO) in **2025** [with several colleagues]
- **Organizer** of the Workshop on *Graph Genetic Algorithm* at the *Genetic and Evolutionary Computation Conference* (GECCO) in **2024** [with several colleagues]
- **Member** of the *EvoApplications Steering Committee* since **2018** (part of *EvoStar*).
- **Organizer** of the workshop on "Evolutionary Machine Learning" at the *International Conference on Parallel Problem Solving from Nature* (PPSN) in **2018** [with Alberto Tonda].
- **Organizer** of the workshop on "Measuring and Promoting Diversity in Evolutionary Algorithms" at the *Genetic and Evolutionary Computation Conference* (GECCO) in **2017** [with Alberto Tonda].
- **Program Chair** of the *European Conference on the Applications of Evolutionary Computation* (part of *EvoSTAR*) in **2017**

- **Organizer** of the workshop on "Measuring and Promoting Diversity in Evolutionary Algorithms" at the *Genetic and Evolutionary Computation Conference* (GECCO) in **2016** [with Alberto Tonda].
- **Program Chair** of the *Biannual European-Latin American Summer School on Design, Test and Reliability* (BELAS) in **2016**
- **Program Chair** of the *European Conference on the Applications of Evolutionary Computation* (part of *EvoSTAR*) in **2016**
- **Publication Chair** of the *European Conference on the Applications of Evolutionary Computation* (part of *EvoSTAR*) in **2015**
- **Organizer** of "EvoHOT" (formerly the "Workshop on Evolutionary Hardware Optimization Techniques", then incorporated as a track in the *European Conference on the Applications of Evolutionary Computation*) from **2004** to **2014**
- **Track chair** of "A-LIFE" (evolutionary robotics, adaptive behavior, and evolvable hardware) at the *Genetic and Evolutionary Computation Conference* (GECCO) in **2011** and **2012**.
- **General Track Chair** of *European Conference on the Applications of Evolutionary Computation* in **2012**.
- **Chair of the Ph.D. forum** for the *20th International Conference on Field Programmable Logic and Applications* (FPL) in **2010**
- **Track chair** of "A-LIFE" (evolutionary robotics, adaptive behavior, and evolvable hardware) at the *Genetic and Evolutionary Computation Conference* (GECCO) in **2009**.
- **Organizer** of the "Special Session on Evolutionary Computation for Electronic Design Automation" at the *IEEE Congress on Evolutionary Computation* (CEC) in **2007**
- **Topic Chair** for the *IEEE Congress on Evolutionary Computation* (CEC) in **2005**
- **Vice-Chair** for *IEEE Congress on Evolutionary Computation* (CEC) in **2004**
- **Track organizer** "Evolutionary Computation and Optimization" for the *ACM Symposium on Applied Computing* (SAC) in **2004**
- **Organizer** of the "Special Session on Evolutionary Design Automation" at the *IEEE Congress on Evolutionary Computation* (CEC) in **2003**
- **Organizer** of the "Special Session on Design Automation" at the *IEEE Congress on Evolutionary Computation* (CEC) in **2001**

He has presented 14 tutorials (13 in top conferences); he has been invited to give 1 keynote and 5 talks (2 in national events).

Awards

- **Best paper award** at *EvoSTAR* for "Use of a Multi-Objective Evolutionary Algorithm for Influence Maximization in Social Networks" in **2017**.
- **Bronze Medal** at *ICPC Southwestern Europe Regional Contest* (for coaching Georgy Skhirtladze, Vuk Stajkic, and Kareem Zarka) in **2017**.
- **Honorable mention award** at the *Human-Competitive Awards* (*The HUMMIES*) for "Artificial evolution in computer aided design: from the optimization of parameters to the creation of assembly programs Automatic Generation of Software-based Functional" in **2012**.
- **Best paper candidate** at *EvoSTAR* for "Exploiting Evolution for an Adaptive Drift-Robust Classifier in Chemical Sensing" in **2010**.
- **Best paper candidate** at *Genetic and Evolutionary Computation Conference* for "Coupling EA and High-level Metrics for the Automatic Generation of Test Blocks for Peripheral Cores" in **2007**.

- **Best paper award** at *IEEE DATE: Design, Automation and Test in Europe* for "An Effective Technique for Minimizing the Cost of Processor Software-Based Diagnosis in SoCs" in **2006**.
- **Silver medal** at *Human-Competitive Awards* (*The HUMMIES*) for *Evolving Assembly Programs: How Games Help Microprocessor Validation* in **2005**.
- **Outstanding Paper Award** at *Symposium on Integrated Circuits and System Design* for "Reducing Test Application Time through Interleaved Scan" in **2002**.
- **Best paper award** at *IEEE Asian Test Symposium* for "Effective Techniques for High-Level ATPG" in **2001**.
- **Special Jury Award for Outstanding Work presented by a student or young researcher** at the *First European Workshops* (organized by *EvoNet*) for "Approximate Equivalence Verification for Protocol Interface Implementation via Genetic Algorithms" in **1999**.

Other Achievements

- The algorithm *EvoCore* reaches the first place in the leaderboards of coreset discovery for 14 different datasets at `https://paperswithcode.com/task/core-set-discovery` in **2020**
- Winner of a 3,000 EUR grant for covering travel expense ("intervento a favore dei giovani ricercatori") in **2007**.
- Winner of a 3,000 EUR grant for covering travel expense ("intervento a favore dei giovani ricercatori") in **2006**
- The evolved corewar warrior *WhiteNoise* is the first program not written by a human to top the *SAL tiny hill*: in **2004**.
- The paper "A Genetic Algorithm for the Computation of Initialization Sequences for Synchronous Sequential Circuits" (**1997**) was selected for inclusion for the *10th Anniversary Compendium of Papers from Asian Test Symposium 1992-2001*

Peer Review Committees

Journal

- *Algorithms* (MDPI - Open Access Journal)
- *Applied Soft Computing* (Elsevier)
- *Biology* (MDPI - Open Access Journal)
- *Entertainment Computing* (Elsevier)
- *IEE Proceedings on Computers and Digital Techniques* (IET)
- *IEEE Design & Test of Computers* (IEEE)
- *IEEE Transactions on Computers* (IEEE)
- *IEEE Transactions on Evolutionary Computations* (IEEE)
- *Integration, the VLSI Journal* (Elsevier)
- *Journal of Electronic Testing: Theory and Applications* (Kluwer)
- *Journal of Genetic Programming and Evolvable Machines* (Springer)
- *Journal on Applied Signal Processing - EURASIP* (ACM)
- *Microprocessors and Microsystems* (Elsevier)

Conferences/Workshops

- *Computational Intelligence, Robotica and Autonomous Systems*
- *European Conference on Evolutionary Computation in Combinatorial Optimisation (EvoCOP)*

- *European Conference on the Applications of Evolutionary Computation (EvoAPPLICATIONS)*
- *European Workshop on Evolutionary Computation in Communications, Networks, and Connected Systems*
- *Genetic and Evolutionary Computation Conference*
- *IEEE Conference on Computational Intelligence and Games*
- *IEEE Conference on Cybernetics and Intelligent Systems*
- *IEEE Conference on Robotics, Automation and Mechatronics*
- *IEEE World Congress on Computational Intelligence (IEEE Congress on Evolutionary Computation)*
- *International Conference on Adaptive and Natural Computing Algorithms*
- *International Conference On Computational ScienceInternational Conference On Computational Science*
- *International Conference on Evolvable Systems: From Biology to Hardware*
- *Second International Conference on Computational Intelligence, Robotics and Autonomous System*
- *The European Workshop on Evolutionary Computation in Image Analysis and Signal Processing*

Language skills

- *C* — native
- *python* — fluent
- *bash scripting*, *C++*, *java*, *perl* — proficient
- *go* — novice
- *ARexx*, *Assembly (x86, IA64, m68k, SPARC)*, *BASIC (Amiga, C64, VB, VBA)*, *C**, *Fortran*, *Lisp (Emacs Lisp)*, *Pascal*, *Prolog* — almost completely forgotten

Working experience

- **2024 – now**: *Full Professor*, Politecnico di Torino (Italy)
- **2016 – 2024**: *Associate Professor*, Politecnico di Torino (Italy)
- **2014 – 2016**: *Co-Founder & Chief Technology Officer*, Ominee S.r.l. (Italy)
- **2011**: *Visiting Professor*, Tongji University, Shanghai (China)
- **2007**: *Visiting Professor*, Tongji University, Shanghai (China)
- **2005 – 2016**: *Assistant Professor*, Politecnico di Torino (Italy)
- **2003 – 2005**: *Researcher*, Politecnico di Torino (Italy)
- **2003**: *Visiting Researcher* (contractor), Intel, Phoenix, Arizona (USA)
- **2001 – 2002**: *Post-doc Fellow*, Politecnico di Torino, Torino (Italy)
- **1998 – 2000**: *Web Designer*, Oscar Marta S.a.S. (Italy)
- **1996 – 2000**: *R & D Engineer*, SOFT++ by Davide Rostagno & C (Italy)
- **1996 – 1999**: *Help-desk Responsible*, "Politecnico a Casa" Internet provider (Italy)

Publications

Books

1. E. Sanchez, G. Squillero, and A. Tonda. *Industrial Applications of Evolutionary Algorithms*. Vol. 34. Springer, 2012, pp. i–120. ISBN: 9783642274664. DOI: 10.1007/978-3-642-27467-1.
2. E. Sanchez, M. Schillaci, and G. Squillero. *Evolutionary Optimization: the μGP toolkit*. Springer, 2011, pp. I–178. ISBN: 9780387094250. DOI: 10.1007/978-0-387-09426-7.
3. A. Macii, E. Macii, M. Poncino, and G. Squillero. *PROGRAMMARE IN C: TEORIA, ESEMPI ED ESERCIZI SVOLTI*. Clut Editrice S.c.r.l., 2006. ISBN: 9788879922197.

Journal papers

1. N. Bellarmino, R. Cantoro, S. M. Fosson, M. Huch, T. Kilian, U. Schlichtmann, and G. Squillero. COSMO: COmpressed Sensing for Models and logging Optimization in MCU Performance Screening. *IEEE Transactions on Computers* **74**(2) (2025), 652–664. DOI: 10.1109/tc.2024.3500378.
2. N. Bellarmino, R. Cantoro, M. Huch, T. Kilian, U. Schlichtmann, and G. Squillero. Deep Learning Strategies for Labeling and Accuracy Optimization in Microcontroller Performance Screening. *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems* **44**(2) (2025), 641–654. DOI: 10.1109/tcad.2024.3436542.
3. A. Calabrese, S. Quer, and G. Squillero. Flying-Probe Testing: A Trajectory Planner and a Benchmark Suite. *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems* (2025), 1–11. DOI: 10.1109/tcad.2025.3567012.
4. S. Quer, T. Madeo, A. Calabrese, G. Squillero, and E. Carraro. Node Embedding and Cosine Similarity for Efficient Maximum Common Subgraph Discovery. *Applied Sciences* **15**(16) (2025), 1–24. DOI: 10.3390/app15168920.
5. N. Bellarmino, R. Cantoro, M. Castelluzzo, R. Correale, G. Squillero, G. Bozzini, F. Castelletti, C. Ciricugno, D. Dalla Gasperina, F. Dentali, G. Poggialini, P. Salerno, and Stefanotaborelli. COVID-19 Detection from Exhaled Breath. *Scientific Reports* **14**(1) (2024). DOI: 10.1038/s41598-024-74104-1.
6. U. Albertin, G. Pedone, M. Brossa, G. Squillero, and M. Chiaberge. A Real-Time Novelty Recognition Framework Based on Machine Learning for Fault Detection. *Algorithms* **16**(61) (2023), 1–26. DOI: 10.3390/a16020061.
7. N. Bellarmino, R. Cantoro, M. Huch, T. Kilian, R. Martone, U. Schlichtmann, and G. Squillero. A Multi-Label Active Learning Framework for Microcontroller Performance Screening. *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems* **42**(10) (2023), 3436–3449. DOI: 10.1109/TCAD.2023.3245989.
8. G. Squillero and A. Tonda. Veni, Vidi, Evolvi (commentary on W. B. Langdon's "Jaws 30"). *Genetic Programming and Evolvable Machines* **24**(2) (2023), 1–4. DOI: 10.1007/s10710-023-09472-0.
9. A. Damljanovic, A. Ruospo, E. Sanchez, and G. Squillero. Machine Learning for Hardware Security: Classifier-based Identification of Trojans in Pipelined Microprocessors. *Applied Soft Computing* **116** (2022), 1–16. DOI: 10.1016/j.asoc.2021.108068.
10. E. Giovannitti, S. Nabavi, G. Squillero, and A. Tonda. A Virtual Sensor for Backlash in Robotic Manipulators. *Journal of Intelligent Manufacturing* **33**(7) (2022), 1921–1937. DOI: 10.1007/s10845-022-01934-z.
11. A. Atzeni, F. Diaz, F. Lopez, A. Marcelli, A. Sanchez, and G. Squillero. The Rise of Android Banking Trojans. *IEEE Potentials* **39**(3) (2020), 13–18. DOI: 10.1109/MPOT.2019.2904744.
12. R. Cantoro, A. Damljanovic, M. Sonza Reorda, and G. Squillero. A Novel Sequence Generation Approach to Diagnose Faults in Reconfigurable Scan Networks. *IEEE Transactions on Computers* **69**(1) (2020), 87–98. DOI: 10.1109/TC.2019.2939125.

13. S. Quer, A. Marcelli, and G. Squillero. The Maximum Common Subgraph Problem: A Parallel and Multi-Engine Approach. *Computation* **8**(2) (2020), 1–29. DOI: 10.3390/computation8020048.
14. A. Bartoli, A. De Lorenzo, E. Medvet, and G. Squillero. Multi-level diversity promotion strategies for Grammar-guided Genetic Programming. *Applied Soft Computing* (2019). DOI: 10.1016/j.asoc.2019.105599.
15. R. Cantoro, A. Damljanovic, M. Sonza Reorda, and G. Squillero. An Enhanced Evolutionary Technique for the Generation of Compact Reconfigurable Scan-Network Tests. *Journal of Circuits, Systems, and Computers* (2019). DOI: 10.1142/S0218126619400073.
16. S. Pellegrino, G. Perboli, and G. Squillero. Balancing the equity-efficiency trade-off in personal income taxation: an evolutionary approach. *Economia Politica* **36**(1) (2019), 37–64. DOI: 10.1007/s40888-018-0132-4.
17. A. Atzeni, F. Díaz, A. Marcelli, A. Sánchez, G. Squillero, and A. Tonda. Countering Android Malware: a Scalable Semi-Supervised Approach for Family-Signature Generation. *IEEE Access* (2018), 59540–59556. DOI: 10.1109/ACCESS.2018.2874502.
18. P. García-sánchez, A. Tonda, A. M. Mora, G. Squillero, and J. J. Merelo. Automated Playtesting in Collectible Card Games using Evolutionary Algorithms: a Case Study in HearthStone. *Knowledge-Based Systems* (2018). DOI: 10.1016/j.knosys.2018.04.030.
19. P. Karpov, G. Squillero, and A. Tonda. VALIS: an evolutionary classification algorithm. *Genetic Programming and Evolvable Machines* **14**(3) (2018), 1–19. DOI: 10.1007/s10710-018-9331-6.
20. P. Bernardi, R. Cantoro, S. De Luca, E. Sanchez, A. Sansonetti, and G. Squillero. Software-Based Self-Test Techniques for Dual-Issue Embedded Processors. *IEEE Transactions on Emerging Topics in Computing* (2) (2017). DOI: 10.1109/TETC.2017.2758641.
21. M. Gaudesi, I. Pomeranz, M. Sonza Reorda, and G. Squillero. New Techniques to Reduce the Execution Time of Functional Test Programs. *IEEE Transactions on Computers* **66**(7) (2017), 1268–1273. DOI: 10.1109/TC.2016.2643663.
22. G. Squillero and A. Tonda. (Over-)Realism in evolutionary computation: Commentary on "On the Mapping of Genotype to Phenotype in Evolutionary Algorithms" by Peter A. Whigham, Grant Dick, and James Maclaurin. *Genetic Programming and Evolvable Machines* (3) (2017), 1–3. DOI: 10.1007/s10710-017-9295-y.
23. D. Bucur, G. Iacca, M. Gaudesi, G. Squillero, and A. Tonda. Optimizing groups of colluding strong attackers in mobile urban communication networks with evolutionary algorithms. *Applied Soft Computing* **40** (2016), 416–426. DOI: 10.1016/j.asoc.2015.11.024.
24. I. Deplano, G. Squillero, and A. Tonda. Anatomy of a portfolio optimizer under a limited budget constraint. *Evolutionary Intelligence* (4) (2016). DOI: 10.1007/s12065-016-0144-3.
25. M. Gaudesi, E. Piccolo, G. Squillero, and A. Tonda. Exploiting Evolutionary Modeling to Prevail in Iterated Prisoner's Dilemma Tournaments. *IEEE Transactions on Computational Intelligence and Ai in Games* **8**(3) (2016), 288–300. DOI: 10.1109/TCIAIG.2015.2439061.
26. J. Maksim, G. Squillero, C. Thiago Santos, T. Valentin, K. Sergei, M. Gaudesi, V. Fabian, R. Jaan, M. Sonza Reorda, P. Leticia Bolzani, U. Raimund, and M. Guilherme Cardoso. Identification and Rejuvenation of NBTI-Critical Logic Paths in Nanoscale Circuits. *Journal of Electronic Testing* **32**(3) (2016), 273–289. DOI: 10.1007/s10836-016-5589-x.
27. J. Perez Acle, R. Cantoro, E. Sanchez, M. Sonza Reorda, and G. Squillero. Observability solutions for in-field functional test of processor-based systems: a survey and quantitative test case evaluation. *Microprocessors and Microsystems* **47**(B) (2016), 392–403. DOI: 10.1016/j.micpro.2016.09.002.
28. G. Squillero and A. P. Tonda. Divergence of character and premature convergence: A survey of methodologies for promoting diversity in evolutionary optimization. *Information Sciences* **329** (2016), 782–799. DOI: 10.1016/j.ins.2015.09.056.
29. B. Doina, I. Giovanni, G. Squillero, and A. Tonda. The impact of topology on energy consumption for collection tree protocols: An experimental assessment through evolutionary computation. *Applied Soft Computing* **16** (2014), 210–222. DOI: 10.1016/j.asoc.2013.12.002.

30. A. Tonda, L. Evelyne, and G. Squillero. A benchmark for cooperative coevolution. *Memetic Computing* **4**(4) (2012), 263–277. DOI: 10.1007/s12293-012-0095-x.
31. S. Di Carlo, M. Falasconi, E. Sanchez, A. Scionti, G. Squillero, and A. Tonda. Increasing pattern recognition accuracy for chemical sensing by evolutionary based drift compensation. *Pattern Recognition Letters* **32**(13) (2011), 1594–1603. DOI: 10.1016/j.patrec.2011.05.019.
32. G. Squillero. Artificial evolution in computer aided design: from the optimization of parameters to the creation of assembly programs. *Computing* **93**(2-4) (2011), 103–120. DOI: 10.1007/s00607-011-0157-9.
33. S. Gandini, W. Ruzzarin, E. Sanchez, G. Squillero, and A. P. Tonda. A Framework for Automated Detection of Power-Related Software Errors in Industrial Verification Processes. *Journal of Electronic Testing* **26**(6) (2010), 689–697. DOI: 10.1007/s10836-010-5184-5.
34. D. Ravotto, E. Sanchez, M. Sonza Reorda, and G. Squillero. Design Validation of Multithreaded Processors using Threads Evolution. *Jics. Journal of Integrated Circuits and Systems* **5**(1) (2010), 67–77.
35. P. Bernardi, E. Sanchez, M. Schillaci, G. Squillero, and M. Sonza Reorda. An Effective technique for the Automatic Generation of Diagnosis-oriented Programs for Processor Cores. *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems* **27**(3) (2008), 570–574. DOI: 10.1109/TCAD.2008.915541.
36. E. Sanchez, M. Sonza Reorda, and G. Squillero. Efficient Techniques for Automatic Verification-Oriented Test Set Optimization. *International Journal of Parallel Programming* **34**(1) (2006), 93–109. DOI: 10.1007/s10766-005-0005-7.
37. F. Corno, E. Sanchez, M. Sonza Reorda, and G. Squillero. Automatic Test Generation for Verifying Microprocessors. *IEEE Potentials* **24**(1) (2005), 34–37. DOI: 10.1109/MP.2005.1405800.
38. F. Corno, E. Sanchez, and G. Squillero. Evolving assembly programs: how games help microprocessor validation. *IEEE Transactions on Evolutionary Computation* **9**(6) (2005), 695–706. DOI: 10.1109/TEVC.2005.856207.
39. G. Squillero. MicroGP - An Evolutionary Assembly Program Generator. *Genetic Programming and Evolvable Machines* **6**(3) (2005), 247–263. DOI: 10.1007/s10710-005-2985-x.
40. F. Corno, M. Sonza Reorda, and G. Squillero. Evolutionary Simulation-Based Validation. *International Journal on Artificial Intelligence Tools* **13**(4) (2004), 897–916. DOI: 10.1142/S0218213004001880.
41. F. Corno, E. Sanchez, M. Sonza Reorda, and G. Squillero. Automatic Test Program Generation: a Case Study. *IEEE Design & Test of Computers* **21**(2) (2004), 102–109. DOI: 10.1109/MDT.2004.1277902.
42. F. Corno, E. Sánchez, M. Sonza Reorda, and G. Squillero. Code generation for functional validation of pipelined microprocessors. *Journal of Electronic Testing* **20**(3) (2004), 269–278. DOI: 10.1023/B:JETT.0000029460.80721.4d.
43. F. Corno, P. E. Prinetto, M. Rebaudengo, M. Sonza Reorda, and G. Squillero. Initializability Analysis of Synchronous Sequential Circuits. *ACM Transactions on Design Automation of Electronic Systems* **7**(2) (2002), 249–264. DOI: 10.1145/544536.544538.
44. F. Corno, M. Sonza Reorda, and G. Squillero. RT-level ITC'99 benchmarks and first ATPG results. *IEEE Design & Test of Computers* **17**(3) (2000), 44–53. DOI: 10.1109/54.867894.

Book chapters

1. G. Ciravegna, P. Barbiero, G. Cirrincione, G. Squillero, and A. Tonda. "Discovering Hierarchical Neural Archetype Sets". In: *Progresses in Artificial Intelligence and Neural Systems*. Vol. 184. Cham: Springer, 2021, pp.255–267. ISBN: 978-981-15-5092-8. DOI: 10.1007/978-981-15-5093-5_24.
2. E. Sanchez, M. Sonza Reorda, and G. Squillero. "Test generation and coverage metrics". In: *Practical Design Verification*. Cambridge University Press, 2009, pp.122–153. ISBN: 9780521859721.

3. P. Bernardi, E. Sanchez, M. Schillaci, G. Squillero, and M. Sonza Reorda. "An Effective Technique for Minimizing the Cost of Processor Software-Based Diagnosis in SoCs". In: *Design, Automation, and Test in Europe - The Most Influential Papers of 10 Years DATE*. Springer, 2008, pp.497–509. ISBN: 9781402064876. DOI: 10.1007/978-1-4020-6488-3_36.
4. E. Sanchez and G. Squillero. "Evolutionary Techniques Applied to Hardware Optimization Problems". In: *Advances in Evolutionary Computing for System Design*. Vol. 66/2007. BERLIN: Springer, 2007, pp.303–326. ISBN: 9783540723769. DOI: 10.1007/978-3-540-72377-6_13.
5. E. Sanchez, M. Sonza Reorda, and G. Squillero. "Automatic Completion and Refinement of Verification Sets for Microprocessor Cores". In: *Lecture Notes in Computer Science*. Vol. 3449. Springer Berlin Heidelberg, 2005, pp.205–214. ISBN: 978-3-540-25396-9. DOI: 10.1007/978-3-540-32003-6_21.
6. E. Sanchez, M. Sonza Reorda, and G. Squillero. "Test Program Generation from High-level Microprocessor Descriptions". In: *System-level Test and Validation of Hardware/Software Systems*. Vol. 17. BERLIN: Springer, 2005, pp.83–106. ISBN: 9781852338992. DOI: 10.1007/1-84628-145-8_6.
7. F. Corno, L. Entrena, C. Lopez, M. Sonza Reorda, and G. Squillero. "New Acceleration Techniques for Simulation-Based Fault-Injection". In: *Frontiers in Electronic Testing*. Vol. 23. Springer, 2003, pp.217–230. ISBN: 9781402075896. DOI: 10.1007/0-306-48711-X_13.
8. F. Corno, L. Entrena, C. Lopez, M. Sonza Reorda, and G. Squillero. "New Acceleration Techniques for Simulation-Based Fault-Injection". In: *Fault Injection Techniques and Tools for Embedded Systems Reliability Evaluation*. Kluwer, 2003, pp.217–230. ISBN: 9781402075896.
9. F. Corno, M. Sonza Reorda, and G. Squillero. "A New Evolutionary Paradigm for Cultivating Cellular Automata for Built-In Self Test of Sequential Circuits". In: *Evolutionary Algorithms for Embedded System Design*. Kluwer Academic Publishers, 2002. ISBN: 9781402072765.
10. F. Corno, M. Sonza Reorda, and G. Squillero. "Built-In Self test of Sequential Circuits — A New Evolutionary Paradigm for Cultivating Cellular Automata". In: *Evolutionary Algorithms for Embedded System Design*. DORDRECHT: Kluwer Academic Publishers, 2002, pp.143–173. ISBN: 9781402072765.
11. M. Baldi, F. Corno, M. Rebaudengo, M. Sonza Reorda, and G. Squillero. "GA-Based Verification of Network Protocols Performance". In: *Telecommunications Optimizations: Heuristic and Adaptive Techniques*. NEW YORK: Wiley and Sons, 2000, pp.185–198. ISBN: 9780471988557.

Papers in conference proceedings

1. N. Bellarmino, R. Cantoro, M. Huch, T. Kilian, U. Schlichtmann, and G. Squillero. Transfer Learning in MCU Performance Screening. In: *IEEE International Test Conference (ITC)*. IEEE, in press.
2. N. Bellarmino, R. Cantoro, M. Huch, T. Kilian, and G. Squillero. In-Context Learning for Microcontroller Performance Screening Using Tabular Foundation Models. In: *28th Euromicro Conference Series on Digital System Design (DSD) 2025*. IEEE, in press.
3. N. Bellarmino, A. Bosio, R. Cantoro, A. Ruospo, E. Sanchez, and G. Squillero. Investigating on Gradient Regularization for Testing Neural Networks. In: *Machine Learning, Optimization, and Data Science 10th International Conference, LOD 2024*. Vol. 15509. Springer, 2025, pp.67–81. ISBN: 978-3-031-82483-8. DOI: 10.1007/978-3-031-82484-5_6.
4. N. Bellarmino, R. Cantoro, M. Huch, T. Kilian, and G. Squillero. Grouped Feature Selection for SMONs Placement in MCU Performance Screening. In: *2025 IEEE 26th Latin American Test Symposium (LATS)*. IEEE, 2025, pp.1–6. ISBN: 978-1-6654-7763-5. DOI: 10.1109/lats65346.2025.10963942.
5. N. Bellarmino, R. Cantoro, M. Huch, T. Kilian, U. Schlichtmann, and G. Squillero. Embedded Feature Selection in MCU Performance Screening. In: *2024 IEEE International Conference on Design, Test and Technology of Integrated Systems (DTTIS)*. IEEE, 2024, pp.1–6. ISBN: 979-8-3503-6312-8. DOI: 10.1109/DTTIS62212.2024.10780418.

6. N. Bellarmino, R. Cantoro, and G. Squillero. U-FLEX: Unsupervised Feature Learning with Evolutionary eXploration. In: *Machine Learning, Optimization, and Data Science*. Vol. 14505. Springer, 2024, pp.364–378. ISBN: 978-3-031-53968-8. DOI: 10.1007/978-3-031-53969-5_27.
7. A. Calabrese, S. Quer, G. Squillero, and A. Tonda. Towards an Evolutionary Approach for Exploting Core Knowledge in Artificial Intelligence. In: *GECCO 2024: Proceedings of the Genetic and Evolutionary Computation Conference*. ACM Association for Cmputing Machinery, 2024, pp.259–262. ISBN: 979-8-4007-0495-6. DOI: 10.1145/3638530.3654230.
8. G. Squillero, A. Tonda, D. Masetta, and M. Sacchet. Byron: A Fuzzer for Turing-complete Test Programs. In: *GECCO '24 Companion: Proceedings of the Genetic and Evolutionary Computation Conference Companion*. New York: Association for Computing Machinery, 2024, pp.1691–1694. ISBN: 979-8-4007-0495-6. DOI: 10.1145/3638530.3664136.
9. N. Bellarmino, R. Cantoro, M. Huch, T. Kilian, U. Schlichtmann, and G. Squillero. Enabling Inter-Product Transfer Learning on MCU Performance Screening. In: *2023 IEEE 32nd Asian Test Symposium (ATS)*. IEEE, 2023, pp.1–6. ISBN: 979-8-3503-0310-0. DOI: 10.1109/ATS59501.2023.10317992.
10. N. Bellarmino, R. Cantoro, M. Huch, T. Kilian, U. Schlichtmann, and G. Squillero. Semi-Supervised Deep Learning for Microcontroller Performance Screening. In: *2023 IEEE European Test Symposium (ETS)*. IEEE, 2023, pp.1–6. ISBN: 979-8-3503-3634-4. DOI: 10.1109/ETS56758.2023.10174083.
11. N. Bellarmino, R. Cantoro, M. Huch, T. Kilian, U. Schlichtmann, and G. Squillero. Feature Selection for Cost Reduction in MCU Performance Screening. In: *24th IEEE Latin-American Test Symposium (LATS)*. IEEE, 2023, pp.1–6. ISBN: 979-8-3503-2597-3. DOI: 10.1109/LATS58125.2023.10154495.
12. A. Tonda, I. Alvarez, S. Martin, G. Squillero, and E. Lutton. Towards Evolutionary Control Laws for Viability Problems. In: *GECCO '23: Proceedings of the Genetic and Evolutionary Computation Conference*. ACM, 2023, pp.1464–1472. ISBN: 9798400701191. DOI: 10.1145/3583131.3590415.
13. F. Angione, D. Appello, J. Aribido, J. Athavale, N. Bellarmino, P. Bernardi, R. Cantoro, C. De Sio, T. Foscale, G. Gavarini, J. Guerrero, M. Huch, G. Iaria, T. Kilian, R. Mariani, R. Martone, A. Ruospo, E. Sanchez, U. Schlichtmann, G. Squillero, M. Sonza Reorda, L. Sterpone, V. Tancorre, and R. Ugioli. Test, Reliability and Functional Safety Trends for Automotive System-on-Chip. In: *2022 IEEE European Test Symposium (ETS)*. IEEE, 2022, pp.1–10. ISBN: 978-1-6654-6706-3. DOI: 10.1109/ETS54262.2022.9810388.
14. F. Angione, D. Appello, J. Aribido, N. Bellarmino, P. Bernardi, R. Cantoro, C. De Sio, T. Foscale, G. Gavarini, M. Huch, T. Kilian, R. Mariani, R. Martone, A. Ruospo, E. Sanchez, U. Schlichtmann, G. Squillero, M. Sonza Reorda, L. Sterpone, V. Tancorre, and R. Ugioli. Test, Reliability and Functional Safety trends for Automotive System-on-Chip. In: *2022 IEEE European Test Symposium (ETS)*. IEEE, 2022. ISBN: 978-1-6654-6706-3. DOI: 10.1109/ETS54262.2022.9810388.
15. P. Barbiero, G. Squillero, and A. Tonda. Predictable Features Elimination: An Unsupervised Approach to Feature Selection. In: *International Conference on Machine Learning, Optimization, and Data Science*. Vol. 13163. Springer, 2022, pp.399–412. ISBN: 978-3-030-95466-6. DOI: 10.1007/978-3-030-95467-3_29.
16. N. Bellarmino, R. Cantoro, M. Huch, T. Kilian, U. Schlichtmann, and G. Squillero. Microcontroller Performance Screening: Optimizing the Characterization in the Presence of Anomalous and Noisy Data. In: *2022 IEEE 28th International Symposium on On-Line Testing and Robust System Design*. IEEE, 2022. ISBN: 978-1-6654-7355-2. DOI: 10.1109/IOLTS56730.2022.9897769.
17. S. Pellegrino, M. Rebuglio, and G. Squillero. Public-Private Partnership: Evolutionary Algorithms as a Solution to Information Asymmetry. In: *International Conference on the Applications of Evolutionary Computation (Part of EvoStar)*. Vol. 13224. Springer, 2022, pp.110–123. ISBN: 978-3-031-02461-0. DOI: 10.1007/978-3-031-02462-7_8.
18. N. Bellarmino, R. Cantoro, M. Huch, T. Kilian, R. Martone, U. Schlichtmann, and G. Squillero. Exploiting Active Learning for Microcontroller Performance Prediction. In: *2021 IEEE European Test Symposium*. IEEE, 2021, pp.1–4. ISBN: 978-1-6654-1849-2. DOI: 10.1109/ETS50041.2021.9465472.

19. A. Calabrese, S. Quer, and G. Squillero. Smart techniques for flying-probe testing. In: *Proceedings of the 16th International Conference on Software Technologies, ICSOFT 2021*. SciTePress, 2021, pp.285–293. ISBN: 978-989-758-523-4. DOI: 10.5220/0010582302850293.
20. A. Damljanovic, A. Ruospo, E. Sanchez, and G. Squillero. A Benchmark Suite of RT-level Hardware Trojansfor Pipelined Microprocessor Cores. In: *Proceedings of the 24th IEEE International Symposium on Design and Diagnostics of Electronic Circuits and Systems*. IEEE, 2021.
21. G. Squillero, E. Giovannitti, A. Tonda, and S. Nabavi. Exploiting Artificial Swarms for the Virtual Measurement of Backlash in Industrial Robots. In: *2021 IEEE Congress on Evolutionary Computation (CEC)*. IEEE, 2021, pp.1743–1750. ISBN: 978-1-7281-8392-3. DOI: 10.1109/CEC45853.2021.9504962.
22. P. Barbiero, G. Ciravegna, G. Cirrincione, A. Tonda, and G. Squillero. Generating Neural Archetypes to Instruct Fast and Interpretable Decisions. In: *DECON 2019*. Vol. 1009. Springer, 2020, pp.45–52. ISBN: 978-3-030-38226-1. DOI: 10.1007/978-3-030-38227-8_6.
23. R. Cantoro, M. Huch, T. Kilian, R. Martone, U. Schlichtmann, and G. Squillero. Machine Learning based Performance Prediction of Microcontrollers using Speed Monitors. In: *IEEE International Test Conference*. IEEE, 2020, pp.1–5. ISBN: 978-1-7281-9113-3. DOI: 10.1109/ITC44778.2020.9325253.
24. E. Giovannitti, G. Squillero, and A. Tonda. Virtual Measurement of the Backlash Gap in Industrial Manipulators. In: *Proceedings SEMCCO 2019 & FANCCO 2019*. Vol. 1092. springer, 2020, pp.189–200. DOI: 10.1007/978-3-030-37838-7_17.
25. G. Squillero and A. Tonda. Evolutionary algorithms and machine learning: Synergies, Challenges and Opportunities. In: *GECCO 2020 Companion - Proceedings of the 2020 Genetic and Evolutionary Computation Conference Companion*. Association for Computing Machinery, Inc, 2020, pp.1190–1205. ISBN: 9781450371278. DOI: 10.1145/3377929.3389863.
26. D. Sudholt and G. Squillero. Theory and practice of population diversity in evolutionary computation. In: *GECCO 2020 Companion - Proceedings of the 2020 Genetic and Evolutionary Computation Conference Companion*. Association for Computing Machinery, Inc, 2020, pp.975–992. ISBN: 9781450371278. DOI: 10.1145/3377929.3389892.
27. P. Barbiero, G. Squillero, and A. Tonda. Beyond coreset discovery: evolutionary archetypes. In: *GECCO '19: Proceedings of the Genetic and Evolutionary Computation Conference Companion*. ACM, 2019, pp.47–48. ISBN: 9781450367486. DOI: 10.1145/3319619.3326789.
28. P. Barbiero, G. Squillero, and A. Tonda. Evolutionary discovery of coresets for classification. In: *GECCO '19: Proceedings of the Genetic and Evolutionary Computation Conference Companion*. ACM, 2019, pp.1747–1754. ISBN: 9781450367486. DOI: 10.1145/3319619.3326846.
29. L. Bonaria, M. Raganato, M. Sonza Reorda, and G. Squillero. A dynamic greedy test scheduler for optimizing probe motion in in-circuit testers. In: *Proceedings of the European Test Symposium*. Vol. 2019-. Institute of Electrical and Electronics Engineers Inc., 2019, pp.1–2. ISBN: 978-1-7281-1173-5. DOI: 10.1109/ETS.2019.8791519.
30. L. Bonaria, M. Raganato, G. Squillero, and M. S. Reorda. Test-Plan Optimization for Flying-Probes In-Circuit Testers. In: *2019 IEEE International Test Conference in Asia (ITC-Asia)*. IEEE, 2019, pp.19–24. ISBN: 978-1-7281-4718-5. DOI: 10.1109/ITC-Asia.2019.00017.
31. A. Damljanovic, A. Jutman, M. Portolan, S. Ernesto, G. Squillero, and A. Tsertov. Simulation-based Equivalence Checking between IEEE 1687 ICL and RTL. In: *Proceedings - 2019 IEEE International Test Conference (ITC)*. IEEE, 2019. DOI: 10.1109/ITC44170.2019.9000181.
32. A. Damljanovic, A. Jutman, G. Squillero, and A. Tsertov. Post-Silicon Validation of IEEE 1687 Reconfigurable Scan Networks. In: *Proceedings - 2019 IEEE European Test Symposium (ETS)*. IEEE, 2019. DOI: 10.1109/ETS.2019.8791546.
33. A. Damljanovic, G. Squillero, C. Cem Gursoy, and M. Jenihhin. On NBTI-induced Aging Analysis in IEEE 1687 Reconfigurable Scan Networks. In: *Proceedings - 2019 IFIP/IEEE International Conference on Very Large Scale Integration*. IEEE, 2019. DOI: 10.1109/VLSI-SoC.2019.8920313.

34. E. Giovannitti, L. Mannella, A. Marcelli, and G. Squillero. Evolutionary Antivirus Signature Optimization. In: *Proceeding of Congress on Evolutionary Computation*. IEEE, 2019, pp.905–912. ISBN: 978-1-7281-2153-6. DOI: 10.1109/CEC.2019.8790240.
35. D. Bucur, G. Iacca, A. Marcelli, G. Squillero, and A. Tonda. Evaluating surrogate models for multi-objective influence maximization in social networks. In: *GECCO 2018 Companion - Proceedings of the 2018 Genetic and Evolutionary Computation Conference Companion*. Association for Computing Machinery, Inc, 2018, pp.1258–1265. ISBN: 9781450357647. DOI: 10.1145/3205651.3208238.
36. D. Bucur, G. Iacca, A. Marcelli, G. Squillero, and A. Tonda. Improving Multi-objective Evolutionary Influence Maximization in Social Networks. In: *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*. Vol. 10784. Springer Verlag, 2018, pp.117–124. ISBN: 9783319775371. DOI: 10.1007/978-3-319-77538-8_9.
37. R. Cantoro, A. Damljanovic, M. Sonza Reorda, and G. Squillero. A New Technique to Generate Test Sequences for Reconfigurable Scan Networks. In: *Proceedings - 2018 IEEE International Test Conference (ITC)*. IEEE, 2018, pp.1–9. DOI: 10.1109/TEST.2018.8624742.
38. R. Cantoro, A. Damljanovic, M. Sonza Reorda, and G. Squillero. A Semi-Formal Technique to Generate Effective Test Sequences for Reconfigurable Scan Networks. In: *Proceedings - 2nd IEEE International Test Conference in Asia, ITC-Asia 2018*. Vol. 2018. IEEE, 2018, pp.55–60. ISBN: 978-1-5386-5180-3. DOI: 10.1109/ITC-Asia.2018.00020.
39. R. Cantoro, L. San Paolo, M. Sonza Reorda, and G. Squillero. An evolutionary technique for reducing the duration of reconfigurable scan network test. In: *Proceedings - 21st IEEE International Symposium on Design and Diagnostics of Electronic Circuits and Systems, DDECS 2018*. Institute of Electrical and Electronics Engineers Inc., 2018, pp.129–134. ISBN: 9781538657546. DOI: 10.1109/DDECS.2018.00030.
40. A. Marcelli, S. Ernesto, L. Sasselli, and G. Squillero. On the mitigation of Hardware Trojan attacks in embedded processors by exploiting a Hardware-based obfuscator. In: *IEEE Proceedings of 3rd International Verification and Security Workshop (IVSW)*. IEEE, 2018. DOI: 10.1109/IVSW.2018.8494850.
41. A. Marcelli, E. Sanchez, G. Squillero, M. U. Jamal, A. Imtiaz, S. Machetti, F. Mangani, P. Monti, D. Pola, A. Salvato, and M. Simili. Defeating hardware Trojan in microprocessor cores through software obfuscation. In: *Proceedings 19th IEEE Latin American Test Symposium (LATS), 2018*. ieee, 2018, pp.1–6. ISBN: 978-1-5386-1472-3. DOI: 10.1109/LATW.2018.8349680.
42. R. Purshouse, C. Zarges, S. Cussat-blanc, M. G. Epitropakis, M. Gallagher, T. Jansen, P. Kerschke, L. Xiaodong, F. G. Lobo, J. Miller, P. S. Oliveto, M. Preuss, G. Squillero, A. Tonda, M. Wagner, T. Weise, D. Wilson, B. Wróbel, and A. Zamuda. Workshops at PPSN 2018. In: *PPSN 2018: Parallel Problem Solving from Nature – PPSN XV*. Vol. 11102. Springer, 2018, pp.490–497. ISBN: 978-3-319-99258-7. DOI: 10.1007/978-3-319-99259-4_39.
43. A. Atzeni, A. Marcelli, F. Muroni, and G. Squillero. HAIT: Heap Analyzer with Input Tracing. In: *Proceedings of the 14th International Joint Conference on e-Business and Telecommunications - Volume 6: SECRYPT*. Vol. Proceedings of the 14th International Joint Conference on e-Business and Telecommunications - Volume 6: SECRYPT. SCITEPRESS, 2017, pp.327–334. ISBN: 978-989-758-259-2. DOI: 10.5220/0006420803270334.
44. D. Bucur, G. Iacca, A. Marcelli, G. Squillero, and A. Tonda. Multi-objective Evolutionary Algorithms for Influence Maximization in Social Networks. In: *Applications of Evolutionary Computation*. Vol. 10199. Springer International Publishing, 2017, pp.221–233. ISBN: 978-3-319-55848-6. DOI: 10.1007/978-3-319-55849-3_15.
45. E. Fadda, G. Perboli, and G. Squillero. Adaptive Batteries Exploiting On-Line Steady-State Evolution Strategy. In: *Applications of Evolutionary Computation*. Vol. 10199. Springer International Publishing, 2017, pp.329–341. ISBN: 978-3-319-55848-6. DOI: 10.1007/978-3-319-55849-3_22.
46. A. Marcelli, M. Restifo, E. Sanchez, and G. Squillero. An Evolutionary Approach to Hardware Encryption and Trojan-Horse Mitigation. In: *Proceedings*. IEEE, 2017. ISBN: 978-1-5090-5826-6. DOI: 10.23919/DATE.2017.7927244.

47. A. Marcelli, M. Restifo, E. Sanchez, and G. Squillero. Defeating Hardware Trojan through Software Obfuscation. In: *Informal proceedings online on the web page of the RESCUE 2017 workshop*. -, 2017.
48. E. Medvet, A. Bartoli, and G. Squillero. An effective diversity promotion mechanism in grammatical evolution. In: *Proceedings of the Genetic and Evolutionary Computation Conference Companion*. New York: ACM, 2017, pp.247–248. ISBN: 9781450349390. DOI: 10.1145/3067695.3076057.
49. I. Deplano, G. Squillero, and A. P. Tonda. Portfolio Optimization, a Decision-Support Methodology for Small Budgets. In: *Applications of Evolutionary Computation*. Vol. 9597. Springer, 2016, pp.58–72. ISBN: 978-3-319-31203-3. DOI: 10.1007/978-3-319-31204-0_5.
50. C. Doerr, N. Bredeche, E. Alba, T. Bartz Beielstein, D. Brockhoff, B. Doerr, G. Eiben, M. G. Epitropakis, C. M. Fonseca, A. Guerreiro, E. Haasdijk, J. Heinerman, J. Hubert, P. K. Lehre, L. Malagò, J. J. Merelo, J. Miller, B. Naujoks, P. Oliveto, S. Picek, N. Pillay, M. Preuss, P. Ryser Welch, G. Squillero, J. Stork, D. Sudholt, A. Tonda, D. Whitley, and M. Zaefferer. Tutorials at PPSN 2016. In: *Parallel Problem Solving from Nature – PPSN XIV*. Vol. 9921. Springer International Publishing, 2016, pp.1012–1022. ISBN: 978-3-319-45822-9. DOI: 10.1007/978-3-319-45823-6_95.
51. P. Garcia Sanchez, A. Tonda, G. Squillero, A. Mora, and J. J. Merelo. Evolutionary deckbuilding in hearthstone. In: *Proceedings of Computational Intelligence and Games (CIG), 2016*. IEEE, 2016, pp.1–8. ISBN: 978-1-5090-1883-3. DOI: 10.1109/CIG.2016.7860426.
52. M. Gaudesi, A. Marcelli, E. Sanchez, G. Squillero, and A. P. Tonda. Challenging Anti-virus Through Evolutionary Malware Obfuscation. In: *Challenging Anti-virus Through Evolutionary Malware Obfuscation*. Vol. Applications of Evolutionary Computation. Springer International Publishing, 2016, pp.149–162. ISBN: 978-3-319-31152-4.
53. F. Marino, G. Squillero, and A. Tonda. A General-Purpose Framework for Genetic Improvement. In: *Parallel Problem Solving from Nature – PPSN XIV*. Vol. 9921. Springer International Publishing, 2016, pp.345–352. ISBN: 978-3-319-45822-9. DOI: 10.1007/978-3-319-45823-6_32.
54. F. Pellerey, M. Jenihhin, G. Squillero, J. Raik, M. Sonza Reorda, V. Tihhomirov, and R. Ubar. Rejuvenation of nbti-impacted processors using evolutionary generation of assembler programs. In: *Proceedings of the Asian Test Symposium*. IEEE Computer Society, 2016, pp.304–309. ISBN: 9781509038084. DOI: 10.1109/ATS.2016.57.
55. G. Squillero and A. Tonda. MPDEA 2016 chairs' welcome & organization. In: *GECCO 2016 Companion - Proceedings of the 2016 Genetic and Evolutionary Computation Conference*. Association for Computing Machinery, Inc, 2016, pp.941–941. ISBN: 9781450343237. DOI: 10.1145/2908961.2931650.
56. G. Squillero and A. Tonda. Promoting diversity in evolutionary algorithms: An updated bibliography. In: *GECCO 2016 Companion - Proceedings of the 2016 Genetic and Evolutionary Computation Conference*. Association for Computing Machinery, Inc, 2016, pp.943–944. ISBN: 9781450343237. DOI: 10.1145/2908961.2931651.
57. J. Belluz, M. Gaudesi, G. Squillero, and A. P. Tonda. Operator Selection using Improved Dynamic Multi-Armed Bandit. In: *GECCO '15 Proceedings of the 2015 on Genetic and Evolutionary Computation Conference*. New York, NY: ACM, 2015, pp.1311–1317. ISBN: 9781450334723. DOI: 10.1145/2739480.2754712.
58. R. Cantoro, M. Gaudesi, E. Sanchez, and G. Squillero. Exploiting Evolutionary Computation in an Industrial Flow for the Development of Code-Optimized Microprocessor Test Programs. In: *Proceedings of the Companion Publication of the 2015 on Genetic and Evolutionary Computation Conference*. New York: ACM New York, 2015, pp.1465–1466. ISBN: 9781450334884. DOI: 10.1145/2739482.2764673.
59. B. Doina, I. Giovanni, G. Squillero, and A. Tonda. Black Holes and Revelations: Using Evolutionary Algorithms to Uncover Vulnerabilities in Disruption-Tolerant NetworksApplications of Evolutionary Computation. In: *Lecture Notes in Computer ScienceApplications of Evolutionary Computation*. Vol. 9028. Springer, 2015, pp.29–41. ISBN: 9783319165486. DOI: 10.1007/978-3-319-16549-3_3.
60. P. Garcia Sanchez, A. P. Tonda, A. M. Mora, G. Squillero, and J. J. Merelo. Towards automatic StarCraft strategy generation using genetic programming. In: *Proceedings 2015 IEEE Conference*

on Computational Intelligence and Games. IEEE, 2015, pp.284–291. ISBN: 978-1-4799-8622-4. DOI: 10.1109/CIG.2015.7317940.

61. M. Gaudesi, A. Marcelli, E. Sanchez, G. Squillero, and A. Tonda. Malware Obfuscation through Evolutionary Packers. In: *Proceedings of the Companion Publication of the 2015 Annual Conference on Genetic and Evolutionary Computation*. ACM, 2015, pp.757–758. ISBN: 9781450334884. DOI: 10.1145/2739482.2764940.
62. N. Palermo, V. Tihhomirov, T. S. Copetti, M. Jenihhin, J. Raik, S. Kostin, M. Gaudesi, G. Squillero, M. Sonza Reorda, F. Vargas, and L. B. Poehls. Rejuvenation of nanoscale logic at NBTI-critical paths using evolutionary TPG. In: *2015 16th Latin-American Test Symposium, LATS 2015*. Institute of Electrical and Electronics Engineers Inc., 2015. ISBN: 9781467367103. DOI: 10.1109/LATW.2015.7102405.
63. G. Squillero. Chromatic Selection – An Oversimplified Approach to Multi-objective OptimizationApplications of Evolutionary Computation. In: *Lecture Notes in Computer ScienceApplications of Evolutionary Computation*. Vol. 9028. Springer, 2015, pp.681–689. ISBN: 9783319165486. DOI: 10.1007/978-3-319-16549-3_55.
64. A. Cani, M. Gaudesi, E. Sanchez, G. Squillero, and A. P. Tonda. Towards Automated Malware Creation: Code Generation and Code Integration. In: *Towards Automated Malware Creation: Code Generation and Code Integration*. ACM SIGAPP, 2014, pp.157–158.
65. B. Doina, I. Giovanni, G. Squillero, and A. Tonda. The tradeoffs between data delivery ratio and energy costs in wireless sensor networks. In: *Proceedings of the 2014 conference on Genetic and evolutionary computation - GECCO '14*. New York: ACM New York, NY, USA, 2014, pp.1071–1078. DOI: 10.1145/2576768.2598384.
66. M. Gaudesi, M. Jenihhin, J. Raik, E. Sanchez, G. Squillero, V. Tihhomirov, and R. Ubar. Diagnostic Test Generation for Statistical Bug Localization using Evolutionary Computation. In: *Lecture Notes in Computer Science*. Vol. 8602. Springer, 2014, pp.425–436. DOI: 10.1007/978-3-662-45523-4_35.
67. M. Gaudesi, E. Piccolo, G. Squillero, and A. P. Tonda. TURAN: Evolving non-deterministic players for the iterated prisoner's dilemma. In: *Evolutionary Computation (CEC), 2014 IEEE Congress on*. IEEE, 2014, pp.21–27. DOI: 10.1109/CEC.2014.6900564.
68. M. Gaudesi, G. Squillero, and A. P. Tonda. Universal information distance for genetic programming. In: *Proceedings of the 2014 conference companion on Genetic and evolutionary computation companion - GECCO Comp '14*. New York: ACM, 2014, pp.137–138. DOI: 10.1145/2598394.2598440.
69. A. Benso, S. Di Carlo, H. U. Rehman, G. M. M. Politano, A. Savino, G. Squillero, A. Vasciaveo, and S. Benedettini. Accounting for Post-Transcriptional Regulation in Boolean Networks Based Regulatory Models. In: *International Work-Conference on Bioinformatics and Biomedical Engineering (IWBBIO) 2013*. Granada: Copicentro Editorial, 2013, pp.397–404.
70. B. Doina, I. Giovanni, G. Squillero, and A. Tonda. An Evolutionary Framework for Routing Protocol Analysis in Wireless Sensor Networks. In: *Titolo volume non avvalorato*. Vol. 7835. Springer, 2013, pp.1–11. ISBN: 9783642371912. DOI: 10.1007/978-3-642-37192-9-1.
71. M. Gaudesi, A. Marion, T. Musner, G. Squillero, and A. Tonda. Evolutionary Optimization of Wetlands Design. In: *Proceedings of the 28th Annual ACM Symposium on Applied Computing*. Vol. I. New York: ACM New York, NY, USA, 2013, pp.176–181. ISBN: 9781450316569. DOI: 10.1145/2480362.2480400.
72. M. Gaudesi, A. Marion, T. Musner, G. Squillero, and A. P. Tonda. An Evolutionary Approach to Wetlands Design. In: *Titolo volume non avvalorato*. Vol. 7833. Springer Berlin Heidelberg, 2013, pp.177–187. DOI: 10.1007/978-3-642-37189-9_16.
73. M. Gaudesi, G. Squillero, and A. Tonda. An Efficient Distance Metric for Linear Genetic Programming. In: *Proceeding of the fifteenth annual conference on Genetic and evolutionary computation conference*. New York: ACM, 2013, pp.925–932. DOI: 10.1145/2463372.2463495.

74. G. Squillero. Industrial applications of evolutionary algorithms. In: *Proceeding of the fifteenth annual conference companion on Genetic and evolutionary computation conference companion - GECCO '13 Companion*. ACM, 2013, pp.935–955. DOI: 10.1145/2464576.2480814.

75. A. Tonda, L. Evelyne, G. Squillero, and W. Pierre Henri. A Memetic Approach to Bayesian Network Structure Learning. In: *Applications of Evolutionary Computation*. Vol. 7835. Springer Verlag Germany: 2013, pp.102–111. ISBN: 9783642371912. DOI: 10.1007/978-3-642-37192-9_11.

76. A. P. Tonda, E. Lutton, R. Reuillon, G. Squillero, and P.-h. Wuillemin. Bayesian network structure learning from limited datasets through graph evolution. In: *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*. Vol. 7244. Springer, 2012, pp.254–265. ISBN: 9783642291388. DOI: 10.1007/978-3-642-29139-5_22.

77. S. Di Carlo, M. Falasconi, E. Sanchez, G. Sberveglieri, A. Scionti, G. Squillero, and A. Tonda. Covariance Matrix Adaptation Evolutionary Strategy for Drift Correction of Electronic Nose Data. In: *AIP Conference Proceedings*. Vol. 1362. 1. AIP. American Institute of Physics, 2011, pp.25–26. DOI: 10.1063/1.3626293.

78. C. Di Chio, A. Brabazon, G. A. Di Caro, R. Drechsler, M. Farooq, J. Grahl, G. Greenfield, C. Prins, J. Romero, G. Squillero, E. Tarantino, A. G. B. Tettamanzi, N. Urquhart, and A. Sima Uyar. Applications of Evolutionary ComputationEvoApplications 2011: EvoCOMNET, EvoFIN, EvoHOT, EvoMUSART, EvoSTIM, and EvoTRANSLOG, Torino, Italy, April 27-29, 2011, Proceedings, Part II. In: vol. 6625. 2. Springer, 2011, pp.1–510.

79. E. Sanchez, G. Squillero, and A. Tonda. Automatic Generation of Software-based Functional Failing Test for Speed Debug and On-silicon Timing Verification2011 12th International Workshop on Microprocessor Test and Verification. In: *2011 12th International Workshop on Microprocessor Test and Verification*. IEEE, 2011, pp.51–55. ISBN: 9780769545943. DOI: 10.1109/MTV.2011.19.

80. E. Sanchez, G. Squillero, and A. P. Tonda. Evolution of Test Programs Exploiting a FSM Processor Model. In: *Titolo volume non avvalorato*. Vol. 6625. 2. Springer, 2011, pp.162–171. DOI: 10.1007/978-3-642-20520-0_17.

81. E. Sanchez, G. Squillero, and A. P. Tonda. Evolutionary failing-test generation for modern microprocessors. In: *GECCO '11 Proceedings of the 13th annual conference companion on Genetic and evolutionary computation*. New York: ACM, 2011. DOI: 10.1145/2001858.2001985.

82. E. Sanchez, G. Squillero, and A. P. Tonda. Group evolution: Emerging synergy through a coordinated effort. In: *Evolutionary Computation (CEC), 2011 IEEE Congress on*. IEEE, 2011, pp.2662–2668. DOI: 10.1109/CEC.2011.5949951.

83. A. P. Tonda, E. Lutton, and G. Squillero. Lamps: A Test Problem for Cooperative Coevolution. In: *Nature Inspired Cooperative Strategies for Optimization*. Vol. 387. Springer, 2011, pp.101–120. DOI: 10.1007/978-3-642-24094-2_7.

84. S. Di Carlo, M. Falasconi, E. Sanchez, A. Scionti, G. Squillero, and A. Tonda. Exploiting Evolution for an Adaptive Drift-Robust Classifier in Chemical Sensing. In: *Proceedings of EvoApplicatons 2010: EvoCOMPLEX, EvoGAMES, EvoIASP, EvoINTELLIGENCE, EvoNUM, and EvoSTOC*. Vol. 6024/2010. 1. Springer, 2010, pp.412–421. ISBN: 9783642122385. DOI: 10.1007/978-3-642-12239-2_43.

85. S. Di Carlo, M. Falasconi, E. Sanchez, A. Scionti, G. Squillero, and A. Tonda. Towards Drift Correction in Chemical Sensors Using an Evolutionary Strategy. In: *Proceedings of the ACM 12th Annual Conference on Genetic and Evolutionary Computation (GECCO)*. New York (NY): ACM, 2010, pp.1329–1330. ISBN: 9781450300728. DOI: 10.1145/1830483.1830727.

86. E. Sanchez, G. Squillero, and A. P. Tonda. Evolving Individual Behavior in a Multi-Agent Traffic Simulator. In: *Applications of Evolutionary Computation*. Vol. 6024/2010. 1. Springer, 2010, pp.11–20. ISBN: 9781010079781. DOI: 10.1007/978-3-642-12239-2_2.

87. S. Gandini, D. Ravotto, W. Ruzzarin, E. Sanchez, G. Squillero, and A. P. Tonda. Automatic Detection of Software Defects: an Industrial Experience. In: *Proceedings GECCO 2009*. 2009. ISBN: 9781605583259.

88. D. Ravotto, E. Sanchez, M. Sonza Reorda, and G. Squillero. Design validation of multithreaded architectures using concurrent threads evolution. In: *22nd Annual Symposium on Integrated Circuits and System Design: Chip on the Dunes*. 2009. ISBN: 9781605587059. DOI: 10.1145/1601896.1601964.
89. D. Ravotto, E. Sanchez, M. Schillaci, and G. Squillero. An Evolutionary Methodology for Test Generation for Peripheral Cores Via Dynamic FSM Extraction. In: *Titolo volume non avvalorato*. Vol. 4974. Springer, 2008, pp.214–223. ISBN: 9783540787600. DOI: 10.1007/978-3-540-78761-7_22.
90. D. Ravotto, E. Sanchez, M. Sonza Reorda, and G. Squillero. On the generation of test programs for chip multithread computer architectures. In: *IEEE International Test Conference (ITC)*. IEEE, 2008, pp.P6.4–P6.4. ISBN: 9781424424030. DOI: 10.1109/TEST.2008.4700678.
91. G. Squillero and A. P. Tonda. A novel methodology for diversity preservation in evolutionary algorithms. In: *roceedings of the 2008 GECCO conference companion on Genetic and evolutionary computation*. 2008, pp.2223–2226. DOI: 10.1145/1388969.1389049.
92. L. Bolzani, E. Sánchez, M. Schillaci, and G. Squillero. Co-evolution of test programs and stimuli vectors for testing of embedded peripheral cores. In: *Evolutionary Computation, 2007. CEC 2007. IEEE Congress on*. IEEE. 2007, pp.3474–3481. DOI: 10.1109/CEC.2007.4424922.
93. W. Di Palma, D. Ravotto, E. Sanchez, M. Schillaci, M. Sonza Reorda, and G. Squillero. Automotive Microcontroller End-of-Line Test via Software-Based Methodologies. In: *Eighth International Workshop on Microprocessor Test and Verification, 2007. MTV '07.* 2007, pp.77–82. ISBN: 9780769532417. DOI: 10.1109/MTV.2007.15.
94. E. Sanchez, M. Schillaci, G. Squillero, and M. Sonza Reorda. An enhanced technique for the automatic generation of effective diagnosis-oriented test programs for processor. In: *Design, Automation & Test in Europe Conference & Exhibition, 2007. DATE'07*. IEEE. 2007, pp.1–6. DOI: 10.1109/DATE.2007.364451.
95. L. M. Veiras Bolzani, E. Sanchez, M. Schillaci, and G. Squillero. Coupling EA and High-Level Metrics for the Automatic Generation of Test Blocks for Peripheral Cores. In: *GECCO'07*. ACM, 2007, pp.1912–1919. DOI: 10.1145/1276958.1277342.
96. E. Sanchez, M. Schillaci, and G. Squillero. Evolving Warriors for the Nano Core. In: *Proceedings of the 2006 IEEE Symposium on Computational Intelligence and Games, CIG'06*. IEEE, 2006, pp.272–278. DOI: 10.1109/CIG.2006.311712.
97. E. Sanchez, M. Schillaci, M. Sonza Reorda, G. Squillero, L. Sterpone, and M. Violante. New Evolutionary Techniques for Test-Program Generation for Complex Microprocessor Cores. In: *Proceedings of the 2005 conference on Genetic and evolutionary computation*. NEW YORK, NY: ACM Press, 2005, pp.2193–2194. DOI: 10.1145/1068009.1068370.
98. E. Sanchez, M. Sonza Reorda, and G. Squillero. On the transformation of manufacturing test sets into on-line test sets for microprocessors. In: *roceedings of the 20th IEEE International Symposium on Defect and Fault Tolerance in VLSI Systems (DFT'05)*. WASHINGTON, DC: IEEE Computer Society, 2005, pp.494–502. ISBN: 9780769524641. DOI: 10.1109/DFTVS.2005.53.
99. E. Sanchez, G. Squillero, and M. Sonza Reorda. Automatic Completion and Refinement of Verification Sets for Microprocessor Cores. In: *Titolo volume non avvalorato*. Springer, 2005, pp.205–214. ISBN: 9783540253969. DOI: 10.110.1007/978-3-540-32003-6_21007/b106856.
100. L. Anghel, E. Sanchez, M. Sonza Reorda, G. Squillero, and R. Velazco. Coupling different methodologies to validate obsolete microprocessors. In: *Proceedings of the Defect and Fault Tolerance in VLSI Systems, 19th IEEE International Symposium on (DFT'04)*. WASHINGTON, DC: IEEE Computer Society, 2004, pp.250–255. ISBN: 9780769522418. DOI: 10.1109/DFTVS.2004.1347846.
101. D. Bonino, F. Corno, and G. Squillero. Dynamic Optimization of Semantic Annotation Relevance. In: *Proceedings of CEC2004, Congress on Evolutionary Computation*. Vol. 2. IEEE press, 2004, pp.1301–1308. ISBN: 9780780385153.
102. W. Lindsay, E. Sanchez, M. Sonza Reorda, and G. Squillero. Automatic Test Programs Generation Driven by Internal Performance Counters. In: *Proceedings of the Fifth International Workshop on*

Microprocessor Test and Verification. WASHINGTON, DC: IEEE Computer Society, 2004, pp.8–13. DOI: 10.1109/MTV.2004.5.

103. E. Sanchez, G. Squillero, and M. Violante. Exploiting HW Acceleration for Classifying Complex Test Program Generation Problems. In: *Titolo volume non avvalorato*. Vol. 3005. 2004, pp.230–239. DOI: 10.1007/978-3-540-24653-4_24.
104. M. Sonza Reorda, R. Velazco, E. Sanchez, and G. Squillero. Automatic verification of RT-level microprocessor cores using behavioral specifications: a case study. In: *XIX Conference on Design of Circuits and Integrated Systems (DCIS'04)*. 2004.
105. D. Bonino, F. Corno, and G. Squillero. A real-time evolutionary algorithm for Web prediction. In: *Proceedings of the IEEE/WIC International Conference on Web Intelligence*. WASHINGTON, DC: IEEE Computer Society, 2003, pp.139–145. ISBN: 9780769519326.
106. D. Bonino, F. Corno, and G. Squillero. An Evolutionary Approach to Web Request Prediction. In: *Proceedings of the Twelfth International World Wide Web Conference - Posters, WWW 2003, Budapest, Hungary, May 20-24, 2003*. 2003.
107. F. Corno, D. Bonino, and G. Squillero. Dynamic Prediction of Web Requests. In: *CEC03: 2003 IEEE Congress on Evolutionary Computation*. IEEE press, 2003, pp.2034–2041.
108. F. Corno, G. Cumani, M. Sonza Reorda, and G. Squillero. Fully automatic test program generation for microprocessor cores. In: *Proceedings of the conference on Design, Automation and Test in Europe - Volume 1*. Vol. 1. WASHINGTON, DC: IEEE Computer Society, 2003, pp.1006–1011. ISBN: 9780769518701.
109. F. Corno, E. Sanchez, and G. Squillero. Exploiting co-evolution and a modified island model to climb the core war hill. In: *Evolutionary Computation, 2003. CEC'03. The 2003 Congress on*. Vol. 3. IEEE. 2003, pp.2217–2221. DOI: 10.1109/CEC.2003.1299947.
110. F. Corno, M. Sonza Reorda, and G. Squillero. Automatic Test Program Generation for Pipelined Processors. In: *Proceedings of the 2003 ACM symposium on Applied computing*. NEW YORK, NY: ACM Press, 2003, pp.736–740. ISBN: 9781581136241. DOI: 10.1145/952532.952676.
111. F. Corno and G. Squillero. An Enhanced Framework for Microprocessor Test-Program Generation. In: *Titolo volume non avvalorato*. Vol. 2610. 2003, pp.307–315. DOI: 10.1007/3-540-36599-0_28.
112. F. Corno and G. Squillero. Exploiting Auto-Adaptive microGP for Highly Effective Test Programs Generation. In: *Evolvable Systems: From Biology to Hardware. ICES 2003*. Vol. 2606. Springer, 2003, pp.262–273. ISBN: 9783540007302. DOI: 10.1007/3-540-36553-2_24.
113. F. Corno, G. Squillero, and M. Sonza Reorda. Code generation for functional validation of pipelined microprocessors. In: *Proceedings of the 8th IEEE European Test Workshop*. WASHINGTON, DC: IEEE Computer Society, 2003, pp.113–118. ISBN: 9780769519081.
114. L. Berrojo, I. Gonzlez, F. Corno, M. Sonza Reorda, G. Squillero, L. Entrena, and C. Lopez. New Techniques for Speeding-up Fault-injection Campaigns. In: *Proceedings of the conference on Design, automation and test in Europe*. WASHINGTON, DC: IEEE Computer Society, 2002, pp.847–852.
115. F. Bota, F. Corno, L. Farinetti, and G. Squillero. A transparent search agent for closed collections. In: *International Conference on Advances in Infrastructure for e-Business, e-Education, e-Service, and e-Medicine on the Internet*. 2002, pp.205–210.
116. F. Corno, G. Cumani, M. Sonza Reorda, and G. Squillero. Efficient machine-code test-program induction. In: *Evolutionary Computation, 2002. CEC'02. Proceedings of the 2002 Congress on*. Vol. 2. IEEE. 2002, pp.1486–1491. DOI: 10.1109/CEC.2002.1004462.
117. F. Corno, G. Cumani, M. Sonza Reorda, and G. Squillero. Evolutionary Test Program Induction for Microprocessor Design Verification. In: *Proceedings of the 11th Asian Test Symposium*. WASHINGTON, DC: IEEE Computer Society, 2002, pp.368–373. ISBN: 9780769518251.
118. F. Corno, G. Cumani, M. Sonza Reorda, and G. Squillero. Automatic test program generation from RT-level microprocessor descriptions. In: *Quality Electronic Design, 2002. Proceedings. International Symposium on*. IEEE. 2002, pp.120–125. DOI: 10.1109/ISQED.2002.996710.
119. F. Corno, M. Sonza Reorda, and G. Squillero. An Evolutionary Algorithm for Reducing Integrated-Circuit Test Application Time. In: *Proceedings of the 2002 ACM symposium on Applied computing*.

NEW YORK, NY: ACM Press, 2002, pp.608–612. ISBN: 9781581134452. DOI: 10.1145/508791.508908.

120. F. Corno, M. Sonza Reorda, and G. Squillero. Evolutionary Techniques for Minimizing Test Signals Application Time. In: *Titolo volume non avvalorato*. Vol. 2279. Springer, 2002, pp.183–189. ISBN: 9783540434320. DOI: 10.1007/3-540-46004-7_19.
121. F. Corno, M. Sonza Reorda, and G. Squillero. Reducing Test Application Time through Interleaved Scan. In: *Proceedings of the 15th symposium on Integrated circuits and systems design*. WASHINGTON, DC: IEEE Computer Society, 2002, pp.89–94. ISBN: 9780769518077.
122. L. Errojo, I. Gonzlez, F. Corno, M. Sonza Reorda, G. Squillero, L. Entrena, and C. Lopez. Analysis of the Equivalences and Dominances of Transient Faults at the Register-Transfer Level. In: *Proceedings of the Proceedings of The Eighth IEEE International On-Line Testing Workshop (IOLTW'02)*. WASHINGTON, DC: IEEE Computer Society, 2002. ISBN: 9780769516417.
123. F. Corno, M. Sonza Reorda, and G. Squillero. An Interpretation Framework for Evaluating High-Level Fault Models and ATPG Capabilities. In: *XVI Conference on Design of Circuits and Integrated Systems (DCIS'01)*. Porto, Portugal, 2001, pp.273–278.
124. F. Corno, G. Cumani, M. Sonza Reorda, and G. Squillero. ARPIA: a High-Level Evolutionary Test Signal Generator. In: *Applications of Evolutionary Computing*. Vol. 2037. Springer, 2001, pp.298–306. ISBN: 3540419209. DOI: 10.1007/3-540-45365-2_31.
125. F. Corno, G. Cumani, M. Sonza Reorda, and G. Squillero. Devising an RT-Level ATPG for uProcessor Cores. In: *WRTLT2001: 2nd Worshop on RTL, ATPG & DFT*. 2001.
126. F. Corno, G. Cumani, M. Sonza Reorda, and G. Squillero. Effective Techniques for High-Level ATPG. In: *Proceedings of the 10th Asian Test Symposium*. WASHINGTON, DC: IEEE Computer Society, 2001, pp.225–230.
127. F. Corno, P. E. Prinetto, M. Rebaudengo, M. Sonza Reorda, and G. Squillero. A genetic algorithm for the computation of initialization sequences for synchronous sequential circuits. In: *10th anniversary compendium of papers from Asian Test Symposium : proceedings : 1992-2001*. IEEE, 2001, pp.213–218. ISBN: 076951233X. DOI: 10.1109/ATS.2001.10066.
128. F. Corno, M. Sonza Reorda, and G. Squillero. Evolving Effective CA/CSTP BIST Architectures for Sequential Circuits. In: *Proceedings of the 2001 ACM symposium on Applied computing*. NEW YORK, NY: ACM Press, 2001, pp.345–350. ISBN: 9781581132878. DOI: 10.1145/372202.372361.
129. F. Corno, M. Sonza Reorda, M. Violante, and G. Squillero. On the Test of Microprocessor IP Cores. In: *Proceedings of the conference on Design, automation and test in Europe*. PISCATAWAY, NJ: IEEE Press, 2001, pp.209–213. ISBN: 9780769509938.
130. F. Corno, G. Cumani, M. Sonza Reorda, and G. Squillero. An RT-level Fault Model with High Gate Level Correlation. In: *Proceedings of the IEEE International High-Level Validation and Test Workshop (HLDVT'00)*. WASHINGTON, DC: IEEE Computer Society, 2000, pp.3–3. ISBN: 9780769507866.
131. F. Corno, G. Cumani, M. Sonza Reorda, and G. Squillero. RT-level Fault Simulation Techniques based on Simulation Command Scripts. In: *DCIS2000: XV Conference on Design of Circuits and Integrated Systems, Le Corum, Montpellier, November 21-24, 2000, pp. 825-830*. 2000, pp.825–830.
132. F. Corno, L. Farinetti, and G. Squillero. An Intelligent User Interface oriented to non-expert users. In: *World Conference on the WWW and Internet*. 2000, pp.675–676.
133. F. Corno, M. Rebaudengo, M. Sonza Reorda, G. Squillero, and M. Violante. Low Power BIST via Hybrid Cellular Automata. In: *VTS2000: 18th IEEE VLSI Test Symposium, Montreal, Canada, May 2000, pp. 29-34*. IEEE, 2000, pp.29–34.
134. F. Corno, M. Rebaudengo, M. Sonza Reorda, G. Squillero, and M. Violante. Low Power BIST via Non-Linear Hybrid Cellular Automata. In: *Proceedings of the 18th IEEE VLSI Test Symposium (VTS'00)*. WASHINGTON, DC: IEEE Computer Society, 2000, pp.29–34. ISBN: 9780769506135.
135. F. Corno, M. Sonza Reorda, and G. Squillero. Automatic Validation of Protocol Interfaces Described in VHDL. In: *Real-World Applications of Evolutionary Computing*. Vol. 1803. Springer, 2000, pp.205–213. ISBN: 3540673539. DOI: 10.1007/3-540-45561-2_20.

136. F. Corno, M. Sonza Reorda, and G. Squillero. Evolving Cellular Automata for Self-Testing Hardware. In: *Evolvable Systems: From Biology to Hardware*. Vol. 1801. Springer, 2000, pp.31–40. ISBN: 3540673385. DOI: 10.1007/3-540-46406-9_4.

137. F. Corno, M. Sonza Reorda, and G. Squillero. High-Level Observability for Effective High-Level ATPG. In: *VTS2000: 18th IEEE VLSI Test Symposium, Montreal, Canada, May 2000, pp. 411-416*. IEEE, 2000, pp.411–416.

138. F. Corno, M. Sonza Reorda, G. Squillero, A. Manzone, and A. Pincetti. Automatic test bench generation for validation of RT-level descriptions: an industrial experience. In: *Proceedings of the conference on Design, automation and test in Europe*. ACM. ACM, 2000, pp.385–389. ISBN: 1581132441. DOI: 10.1145/343647.343802.

139. F. Corno, M. Sonza Reorda, G. Squillero, and M. Violante. A Genetic Algorithm-based System for Generating Test Programs for Microprocessor IP Cores. In: *ICTAI2000: The Twelfth IEEE International Conference on Tools with Artificial Intelligence, Vancouver, British Columbia, Canada, November 13-15, 2000, pp. 195-198*. IEEE, 2000, pp.195–198.

140. F. Corno, M. Sonza Reorda, G. Squillero, and M. Violante. CA-CSTP: A new BIST Architecture for Sequential Circuit. In: *Proceedings of the IEEE European Test Workshop*. 2000, pp.167–172. ISBN: 9780769507019.

141. F. Corno and G. Squillero. Archivi on-line fruibili da utenti inesperti: un'esperienza nel campo della disabilità. In: *Convegno AICA sull'Informatica per la Didattica*. 2000, pp.181–187.

142. F. Corno, M. S. Reorda, and G. Squillero. Approximate equivalence verification of sequential circuits via genetic algorithms. In: *Design, Automation and Test in Europe Conference and Exhibition 1999. Proceedings*. IEEE. NEW YORK, NY: ACM, 1999, pp.754–755. ISBN: 1581131216. DOI: 10.1145/307418.307431.

143. F. Corno, M. Sonza Reorda, and G. Squillero. Approximate Equivalence Verification for Protocol Interface Implementation via Genetic Algorithms. In: *Titolo volume non avvalorato*. Vol. 1596. Springer, 1999, pp.182–192. ISBN: 3540658378. DOI: 10.1007/10704703_15.

144. F. Corno, M. Sonza Reorda, and G. Squillero. High Quality Test Pattern Generation for RT-level VHDL Descriptions. In: *2nd International Workshop on Microprocessor Test and Verification Common Challenges and Solutions*. IEEE, 1999.

145. F. Corno, M. Sonza Reorda, and G. Squillero. Optimizing Deceptive Functions with the SG-Clans Algorithm. In: *Congress on Evolutionary Computation*. IEEE, 1999, pp.2190–2195.

146. F. Corno, M. Sonza Reorda, and G. Squillero. Simulation-Based Sequential Equivalence Checking of RTL VHDL. In: *Proceedings the 6th IEEE International Conference on Electronics, Circuits and Systems*. IEEE, 1999, pp.351–354.

147. F. Corno, M. Sonza Reorda, and G. Squillero. Verifying the Equivalence of Sequential Circuits with Genetic Algorithms. In: *Congress on Evolutionary Computation*. IEEE, 1999, pp.1293–1297.

148. F. Corno, M. Sonza Reorda, and G. Squillero. A New Evolutionary Algorithm Inspired by the Selfish Gene Theory. In: *IEEE International Conference on Evolutionary Computation*. IEEE, 1998, pp.575–580. DOI: 10.1109/ICEC.1998.700092.

149. F. Corno, M. Sonza Reorda, and G. Squillero. The Selfish Gene Algorithm: a New Evolutionary Optimization Strategy. In: *Proceedings of the 1998 ACM symposium on Applied Computing*. NEW YORK, NY: ACM Press, 1998, pp.349–355. ISBN: 9780897919692. DOI: 10.1145/330560.330838.

150. F. Corno, M. Sonza Reorda, and G. Squillero. VEGA: A Verification Tool Based on Genetic Algorithms. In: *Proceedings the International Conference on Circuit Design*. 1998, pp.321–326.

151. M. Baldi, F. Corno, P. E. Prinetto, M. Rebaudengo, M. Sonza Reorda, and G. Squillero. Simulation-Based Verification of Network Protocols Performance. In: *Proceedings of the IFIP WG 10.5 International Conference on Correct Hardware Design and Verification Methods: Advances in Hardware Design and Verification*. LONDON: Chapman & Hall, Ltd, 1997, pp.236–251. ISBN: 9780412813306.

152. M. Baldi, F. Corno, M. Rebaudengo, M. Sonza Reorda, and G. Squillero. GA-based Performance Analysis of Network Protocols. In: *9th IEEE Proceedings the International Conference on Tools with Artificial Intelligence*. IEEE, 1997, pp.118–124. ISBN: 0818682035. DOI: 10.1109/TAI.1997.632245.

153. F. Corno, P. E. Prinetto, M. Rebaudengo, M. Sonza Reorda, and G. Squillero. A New Approach for Initialization Sequences Computation for Synchronous Sequential Circuits. In: *1997 IEEE Proceedings of the International Conference on Computer Design*. IEEE, 1997, pp.381–386.

Editorials

1. R. Cantoro, A. Damljanovic, M. Sonza Reorda, and G. Squillero. *Comparing different approaches to the test of Reconfigurable Scan Networks*. 2018.
2. G. Squillero and A. Tonda. *Promoting diversity in evolutionary optimization: Why and how*. 2018. DOI: 10.1145/3205651.3207878.
3. G. Squillero and K. Sim. *Applications of Evolutionary Computation (Part I)*. 2017.
4. G. Squillero and K. Sim. *Applications of Evolutionary Computation (Part II)*. 2017.
5. G. Squillero and P. Burelli. *Applications of Evolutionary Computation (Part I)*. 2016.
6. G. Squillero and P. Burelli. *Applications of Evolutionary Computation (Part II)*. 2016.
7. A. M. Mora and G. Squillero. *Applications of Evolutionary Computation*. 2015.
8. A. I. Esparcia Alcazar, S. Sara, A. Alexandros, C. Carlos, F. Ivanoe De, C. Antonio Della, D. Konrad, E. Aniko, T. Ernesto, V. Francisco Fernandez De, B. Paolo, S. Kevin, C. Stefano, S. Anabela, J. Merelo, U. Neil, H. Evert, Z. Mengjie, G. Squillero, A. E. Eiben, T. Andrea, G. Kyrre, R. Philipp, and S. Robert. *Applications of Evolutionary Computation*. 2013.
9. C. Di Chio, A. Agapitos, S. Cagnoni, C. Cotta, F. Fernández De Vega, G. A. Di Caro, R. Drechsler, A. Ekárt, A. I. Esparcia Alcázar, M. Farooq, W. B. Langdon, J. J. Merelo Guervós, M. Preuss, H. Richter, S. Silva, A. Simões, G. Squillero, E. Tarantino, A. Tettamanzi, J. Togelius, N. Urquhart, A. S. Uyar, and G. N. Yannakakis. *Applications of Evolutionary Computation*. 2012.
10. N. Krasnogor, P. L. Lanzi, A. Engelbrecht, D. Pelta, C. Gershenson, G. Squillero, A. Freitas, M. Ritchie, M. Preuss, C. Gagne, Y. Soon Ong, G. Raidl, M. Gallager, J. Lozano, C. Coello Coello, D. Landa Silva, N. Hansen, S. Meyer Nieberg, J. Smith, G. Eiben, E. Bernado Mansilla, W. Browne, L. Spector, T. Yu, J. Clune, G. Hornby, M. L. Wong, P. Collet, S. Gustafson, J. P. Watson, M. Sipper, S. Poulding, G. Ochoa, M. Schoenauer, C. Witt, and A. Auger. *GECCO'11: Proceedings of the 13th annual conference on Genetic and evolutionary computation*. New York, 2011.
11. G. Raidl, F. Rothlauf, G. Squillero, R. Drechsler, T. Stuetzle, M. Birattari, C. B. Congdon, M. Middendorf, C. Blum, C. Cotta, P. Bosman, J. Grahl, J. Knowles, D. Corne, H. Beyer, K. Stanley, J. F. Miller, J. Hemert, T. Lenaerts, M. Ebner, J. Bacardit, M. O'neill, M. Penta, B. Doerr, T. Jansen, R. Poli, and E. Alba. *GECCO '09: Proceedings of the 11th annual conference on Genetic and evolutionary computation*. Montreal, 2009.
12. M. Giacobini, A. Brabazon, S. Cagnoni, G. Di Caro, R. Drechsler, A. Ekart, A. Esparcia Alcazar, M. Farooq, A. Fink, J. Mccormack, M. O'neill, J. Romero, F. Rothlauf, G. Squillero, S. Uyar, and Y. Shengxiang. *Applications of Evolutionary ComputingEvoWorkshops 2008: EvoCOMNET, EvoFIN, EvoHOT, EvoIASP, EvoMUSART, EvoNUM, EvoSTOC, and EvoTransLog, Naples, Italy, March 26-28, 2008. Proceedings*. 2008.
13. M. Giacobini, A. Brabazon, S. Cagoni, G. A. Di Caro, R. Drechsler, M. Farooq, A. Fink, E. Lutton, P. Machado, S. Minner, M. O'neill, J. Romero, F. Rothlauf, G. Squillero, and H. Takagi. *Applications of Evolutionary Computing: EvoWorkshops 2007:EvoCOMNET, EvoFIN, EvoIASP, EvoINTERACTION, EvoMUSART, EvoSTOC, and EvoTransLog*. BERLIN, 2007.
14. F. Rothlauf, J. Branke, S. Cagnoni, E. Costa, C. Cotta, R. Drechsler, E. Lutton, P. Machado, J. H. Moore, J. Romero, G. D. Smith, G. Squillero, and H. Takagi. *Applications of Evolutionary Computing, EvoWorkshops 2006: EvoBIO, EvoCOMNET, EvoHOT, EvoIASP, EvoINTERACTION, EvoMUSART, and EvoSTOC*. BERLIN, 2006.
15. F. Rothlauf, J. Branke, S. Cagnoni, S. Corne, R. Drechsler, J. Yaochu, P. Machado, P. Marchiori, P. Romero, and G. Squillero. *Applications of Evolutionary Computing, EvoWorkshops 2005: EvoBIO, EvoCOMNET, EvoHOT, EvoIASP, EvoMUSART, and EvoSTOC*. BERLIN, 2005.

16. G. Raidl, G. Cagnoni, G. Branke, G. Corne, R. Drechsler, J. Yaochu, C. Johnson, C. Machado, E. Marchiori, F. Rothlauf, G. Smith, and G. Squillero. *Applications of Evolutionary Computing, EvoWorkshops 2004: EvoBIO, EvoCOMNET, EvoHOT, EvoIASP, EvoMUSART, and EvoSTOC*. BERLIN, 2004.