

Stefano Cherubin

Curriculum Vitae

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🌐 skeru.github.io

in [stefanocherubin](#)

🔗 [skeru](#)

(preferred contact: e-mail)

Experience

- now **Associate Professor**, *NTNU*, Norway
- July 2023 Førsteamanuensis in Compiler Design.
Department of Computer Science.
- June 2023 **Lecturer**, *Edinburgh Napier University*, UK
- June 2021 Lecturer in Computer Science.
School of Computing, Engineering and Built Environment.
Module Leader, Personal Development Tutor, Lecturer, and Researcher.
- Feb 2021 **Software Engineer**, *Codeplay Software Limited*, UK
- Mar 2020 Compiler Engineer and Research Engineer. Working on LLVM-based compiler and runtime environment optimizations for OpenCL, SYCL, and other heterogeneous programming languages.
Arcoran ComputeAorta product division and R&D division.
- Feb 2020 **Post-Doc Research Fellow**, *Politecnico di Milano*, Italy
- Sep 2019 Member of the compiler team; designing and implementing an LLVM-based compiler prototype for the Modelica modelling and simulation language.
- Aug 2019 **Research Fellow**, *Politecnico di Milano*, Italy
- Sep 2015 Member of the compiler team; designing and implementing analysis/tools based on the LLVM compiler infrastructure; principal sw engineer for the TAFFO open source project (github.com/HEAPlab/TAFFO); working on the H2020 ANTAREX project (AutoTuning and Adaptivity appRoach for Energy efficient eXascale HPC systems - www.antarex-project.eu)
- 2019 **Teaching Assistant (Lecturing)**, *Politecnico di Milano*, Italy
- 2015 Dipartimento di Elettronica, Informazione e Bioingegneria
- Apr 2017 **Visiting Research Fellow**, *INRIA Rennes*, France
- Mar 2017 Working on fixed-point exploitation for general purpose and high-performance computing. Supervisor: Erven Rohou.
- Oct 2016 **Visiting Research Fellow**, *INRIA Rennes*, France
- Sep 2016 Studying fixed-point computation and its applications to general purpose and to high-performance computing. Supervisor: Erven Rohou.

Education

- Jul 2019 **PhD**, *Politecnico di Milano*, Milan, Italy
Computer Engineering. *Compiler-Assisted Dynamic Precision Tuning*.
Advisor: prof. G. Agosta
- Apr 2015 **Master of Science**, *Politecnico di Milano*, Milan, Italy
Computer Engineering (grade 110/110). *A novel music browsing framework: the AMBIF project*. Advisor: prof. A. Sarti. Co-advisor: prof. M. Zanoni.
- 2011 **Bachelor of Science**, *Politecnico di Milano*, Milan, Italy
Computer Engineering (grade 104/110)
- 2008 **High School**, *E. Alessandrini (High school with technical focus)*,
Vittuone (MI), Italy
Computer Science (grade 100/100)

Teaching Responsibilities

- 2025-26 **Module Leader & Lecturer**, *NTNU*, NO
TDT4205 Compiler Construction
- 2024-25 **Module Leader & Lecturer**, *NTNU*, NO
TDT88 Advanced Topics in System Software
- 2024-25 **Module Leader & Lecturer**, *NTNU*, NO
TDT4205 Compiler Construction
- 2023-24 **Module Leader & Lecturer**, *NTNU*, NO
TDT4205 Compiler Construction
- 2022-23 **Module Leader & Lecturer**, *Edinburgh Napier University*, UK
SET-09124 Sensing Systems for Pervasive Applications
- 2022-23 **Module Leader & Lecturer**, *Edinburgh Napier University*, UK
SET-08114 Mobile Application Development
- 2022-23 **Lecturer**, *Edinburgh Napier University*, UK
SET-10113 Secure Software Development
- 2021-22 **Module Leader & Lecturer**, *Edinburgh Napier University*, UK
SET-09124 Sensing Systems for Pervasive Applications
- 2021-22 **Lecturer**, *Edinburgh Napier University*, UK
SET-08114 Mobile Application Development
- 2021-22 **Lecturer**, *Edinburgh Napier University*, UK
SET-10413 Secure Software Development
- 2021-22 **Lecturer**, *Edinburgh Napier University*, UK
SET-10713 Secure Software Development
- 2020-21 **Lecturer**, *Edinburgh Napier University*, UK
SET-09118 Sensing Systems for Mobile Applications

- 2020-21 **Lecturer**, *Edinburgh Napier University*, UK
SET-10113 Secure Software Development
- 2020-21 **Lecturer**, *Edinburgh Napier University*, UK
SET-10413 Secure Software Development
- 2018-19 **Teaching Assistant (Lecturing)**, *Politecnico di Milano*, Italy
- 2016-17 Teaching assistant for *Code Transformation and Optimization*, 2nd year of Computer Science Eng. (MSc). Duties include **10 hours of lecture** per year (in English). Class size: ~15 students. Teaching material can be found at github.com/skeru/LLVM-intro
- 2019-20 **Teaching Assistant (Lecturing)**, *Politecnico di Milano*, Italy
- 2015-16 Teaching assistant for *Informatica A* module, 1st year of Management Eng. (BSc). Duties include **38 to 40 hours of lecture** per year (in Italian). Class size: ~150 students. Teaching material (in italian) can be found at github.com/skeru/Info-A
- 2018-2019 **Tutor (Lecturing)**, *Politecnico di Milano*, Italy
- 2015-16 Tutor for *Formal Languages and Compilers*, Computer Science Eng. (MSc). Duties include **8 hours of lecture** per year (in English). Class size: ~80 students. Lectures covered the topics of the course related to ACSE compiler.

Languages

Italian	Native	
English	Good	<i>TOEIC certification, 2011 (score 760/990) level C1</i>

Awards

- Dec 2020 **Best Paper Award (shortlisted)**, 58th DAC, 2020
Architecture-aware Precision Tuning with Multiple Number Representation Systems
- Jul 2019 **Best Poster Award**, *ACM International Conference on Computing Frontiers*, 2019
Fixed Point Exploitation via Compiler Analyses and Transformations
- Jul 2019 **Summer of Code**, *OPRECOMP*, 2019, €5 000
TAFFO open source project

Open Source Projects

- TAFFO **Tuning Assistant for Floating point and Fixed point Optimisations**, *Role: Founder, Supervisor*, <https://taffo-org.github.io>
- MARCO **Modelica Advanced Research COmpiler**, *Role: Founder, Supervisor*, <https://github.com/marco-compiler/marco>
- libVC **libVersioningCompiler**, *Role: Founder, Supervisor, Developer, Maintainer*, <https://github.com/skeru/libVersioningCompiler>

Research Projects

- Dec 2024 **ARCHYTAS**, *EDF 2023*, 2024 – 2027, role: Partner main contact.
Non-conventional AI-accelerators for defence applications – 20,000,000 EUR
(share: 510,000 EUR)
- Dec 2024 **CAPSARII**, *EDF 2023*, 2024 – 2027, role: Partner main contact.
Smart textiles and related ICT framework for health monitoring –
3,000,000 EUR (share: 460,000 EUR)
- Dec 2022 **KTP – Knowledge Transfer Partnership**, *InnovateUK*, 2022 –
2024, role: PI.
Research collaboration between Edinburgh Napier University and Codeplay
Software Limited. Project n. 10027750 – 167,000 GBP
- Feb 2022 **Starter Grant**, *Edinburgh Napier University, School of Computing*,
2022, role: Principal Investigator
Research funding for internships and workshop organisation – 7,000 GBP

Bibliometric

h-index	15	citation number	564	(Google Scholar)
Journal count	11	Conf count	14	
Co-authors	78			

Selected Publications

Precision tuning research line:

- D. Cattaneo, M. Chiari, N. Fossati, S. Cherubin, G. Agosta “Architecture-aware Precision Tuning with Multiple Number Representation Systems” *58th DAC – Design Automation Conference*. Nov 2021. DOI: 10.1109/DAC18074.2021.9586303
Best Paper Award nominee (awarded to top 5 papers over 200+ accepted world-leading articles).
This paper first introduces a formal metric to compare different number representations for the purpose of performing precision tuning. In this paper, we also provide an experimental evaluation using a new architectural model to exploit the trade-off between accuracy and performance.
- S. Cherubin, G. Agosta “Tools for reduced precision computation: a survey” *ACM Computing Surveys*. Apr 2020. DOI: 10.1145/3381039
This survey paper provides a comprehensive review of the precision tuning technologies presented in the scientific literature so far. This field is in rapid evolution thanks to the huge interest of world-leading hardware manufacturers in exploiting reduced precision data types on emerging many-core accelerators.
- S. Cherubin, D. Cattaneo, M. Chiari, G. Agosta “Dynamic Precision Autotuning with TAFFO”. *ACM Transactions on Architecture and Code Optimization (TACO)*. May 2020. DOI: 10.1145/3388785
This paper first combine the dynamic compilation approach to the approximate computing technique of precision tuning. This combination leverage the best part of both worlds and improves their effectiveness. The software used in this paper is open source and currently re-used in other excellent international research initiatives.

Compiler and optimizations for digital twins research line:

- M. Fioravanti, D. Cattaneo, F. Terraneo, S. Seva, S. Cherubin, G. Agosta, F. Casella, A. Leva “Array-Aware Matching: Taming the Complexity of Large-Scale Simulation Models” *ACM Transactions on Mathematical Software*. Volume 49. Issue 3. Sep 2023. DOI: 10.1145/3611661
This paper presents an innovative algorithm to drastically reduce the complexity of the “matching” algorithm, which is a key step in the simulation of equation-based digital twin models. This work is part of an ongoing effort to optimise the whole model translation and simulation pipeline, leading to world-leading impact in this field.
- G. Agosta, E. Baldino, F. Casella, S. Cherubin, A. Leva, F. Terraneo “Towards a High-Performance Modelica Compiler” *Proceedings of the 13th International Modelica Conference*. Rensburg, Germany. Mar 2019. DOI: 10.3384/ecp19157313
This paper details the roadmap, the ambition and the expected impact of the research

line. While it does not represent a key achievement in itself, it accurately describes the vision of the research line I am pursuing, and I invite the reader to consider it appropriately.

Other Journal Publications

- G. Magnani, D. Cattaneo, L. Denisov, G. Tagliavini, G. Agosta, S. Cherubin “Synergistic memory optimisations: precision tuning in heterogeneous memory hierarchies” *IEEE Transactions on Computers*. Volume 7. Issue 9. Sep 2025. DOI: 10.1109/TC.2025.3586025
- L. Denisov, G. Magnani, D. Cattaneo, G. Agosta, S. Cherubin “The Impact of Profiling Versus Static Analysis in Precision Tuning” *IEEE Access*. Volume 12. May 2024. DOI: 10.1109/ACCESS.2024.3401831
- D. Cattaneo, M. Chiari, G. Agosta, S. Cherubin “TAFFO: The Compiler-Based Precision Tuner” *SoftwareX* Volume 20. Dec 2022. DOI: 10.1016/j.softx.2022.101238.
- D. Cattaneo, M. Chiari, G. Magnani, N. Fossati, S. Cherubin, G. Agosta “FixM: Code Generations of Fixed Point Mathematical Functions” *Sustainable Computing: Informatics and Systems*. Volume 29. Part B. March 2021. DOI: 10.1016/j.suscom.2020.100478
- D. Gadioli, G. Palermo, S. Cherubin, E. Vitali, G. Agosta, C. Manelfi, A. Beccari, C. Cavazzoni, N. Sanna, C. Silvano “Tunable approximations to control time-to-solution in an HPC molecular docking Mini-App” *The Journal of Supercomputing*. Apr 2020. DOI: 10.1007/s11227-020-03295-x
- S. Cherubin, D. Cattaneo, A. Di Bello, M. Chiari, G. Agosta “TAFFO: Tuning Assistant for Floating point to Fixed point Optimization” *IEEE Embedded Systems Letters*. Apr 2019. DOI: 10.1109/LES.2019.2913774 <https://github.com/HEAPLab/TAFFO>
- C. Silvano, G. Agosta, A. Bartolini, A. Beccari, L. Benini, L. Besnard, J. Bispo, R. Cmar, J. M. P. Cardoso, C. Cavazzoni, D. Cesarini, S. Cherubin, F. Ficarelli, D. Gadioli, M. Golasowski, A. Libri, J. Martinovič, G. Palermo, P. Pinto, E. Rohou, K. Slaninová, E. Vitali “The ANTAREX domain specific language for high performance computing” *Microprocessors and Microsystems*. May 2019. DOI: 10.1016/j.micpro.2019.05.005
- S. Cherubin, G. Agosta. “libVersioningCompiler: An easy-to-use library for dynamic generation and invocation of multiple code versions” *SoftwareX*, Volume 7, January–June 2018, Pages 95-100, ISSN 2352-7110. DOI: 10.1016/j.softx.2018.03.006.

Other Conference Publications

- G. Agosta, S. Cherubin, D. Christ, F. Conti, A. Djupdal, M. Jung, G. Keramidas, R. Passerone, P. Rech, E. Ricci, P. Velha, F. Vella, K. S. Yildirim, N. Wilbert “Architecture, Simulation and Software Stack to Support Post-CMOS Accelerators: The ARCHYTAS Project” 2025 IEEE Computer Society Annual Symposium on VLSI (ISVLSI). Kalamata, Greece. Jul 2025. DOI: 10.1109/ISVLSI65124.2025.11130220
- L. Denisov, D. Cattaneo, G. Magnani, G. Tagliavini, G. Agosta, S. Cherubin “SeTHet – Sending Tuned numbers over DMA onto Heterogeneous clusters: an automated precision tuning story” *21st ACM International Conference on Computing Frontiers*. Ischia, Italy. May 2024. DOI: 10.1145/3649153.3649203
- L. Denisov, G. Magnani, D. Cattaneo, G. Agosta, S. Cherubin “Profiling vs Static Analysis: The Impact on Precision Tuning” *39th ACM/SIGAPP Symposium on Applied Computing*. Avila, Spain. April 2024. DOI: 10.1145/3605098.3636080
- M. Scuttari, N. Camillucci, D. Cattaneo, G. Agosta, F. Casella, S. Cherubin, F. Terraneo “Clever DAE: Compiler Optimizations for Digital Twins at Scale” *20th ACM International Conference on Computing Frontiers*. Bologna, Italy. 2023. DOI: 10.1145/3587135.3589945
- G. Agosta, F. Casella, D. Cattaneo, S. Cherubin, A. Leva, M. Scuttari, F. Terraneo “MARCO: An Experimental High-Performance Compiler for Large-Scale Modelica Models” *15th International Modelica Conference 2023*. Aachen, Germany. Oct 2023. DOI: 10.3384/ecp20413
- D. Cattaneo, M. Chiari, S. Cherubin, A. Di Bello, G. Agosta “Feedback-Driven Performance and Precision Tuning for Automatic Fixed Point Exploitation” *International Conference on Parallel Computing (ParCo)*. Sep 2019. Prague, Czech Republic. DOI: 10.3233/APC20054
- C. Silvano, G. Agosta, A. Bartolini, A. Beccari, L. Benini, L. Besnard, J. Bispo, R. Cmar, J. M. P. Cardoso, C. Cavazzoni, D. Cesarini, S. Cherubin, F. Ficarelli, D. Gadioli, M. Golasowski, I. Lasri, A. Libri, C. Manelfi, J. Martinovič, G. Palermo, P. Pinto, E. Rohou, N. Sanna, K. Slaninová, E. Vitali “Supporting the Scale-Up of High Performance Application to Pre-Exascale Systems: The ANTAREX Approach” *Euromicro PDP 2019*. Pavia, Italy. Feb 2019. DOI: 10.1109/EMPDP.2019.8671584
- D. Cattaneo, A. Di Bello, S. Cherubin, F. Terraneo, G. Agosta “Embedded Operating System Optimization through Floating to Fixed Point Compiler Transformation” *Euromicro DSD 2018*. Prague, Czech Republic. Aug 2018. DOI: 10.1109/DSD.2018.00042
- C. Silvano, G. Agosta, A. Bartolini, A. Beccari, L. Benini, L. Besnard, J. Bispo, R. Cmar, J. M. P. Cardoso, C. Cavazzoni, S. Cherubin, D. Gadioli, M. Golasowski, I. Lasri, J. Martinovič, N. Sanna, G. Palermo, P. Pinto, E. Rohou, K. Slaninová, E. Vitali “ANTAREX: A DSL-based Approach to Adaptively Optimizing and Enforcing Extra-Functional Properties in High Performance Computing” *Euromicro DSD 2018*. Prague, Czech Republic. Aug 2018. DOI: 10.1109/DSD.2018.00105
- C. Silvano, G. Palermo, G. Agosta, A. Ashouri, D. Gadioli, S. Cherubin, E. Vitali, L. Benini, A. Bartolini, D. Cesarini, J. M. P. Cardoso, J. Bispo, P. Pinto, R. Nobre, E. Rohou, L. Besnard, I. Lasri, N. Sanna, C. Cavazzoni, R. Cmar, J. Martinovič,

- K. Slaninová, M. Golasowski, A. Beccari, C. Manelfi “Autotuning and Adaptivity in Energy Efficient HPC Systems: The ANTAREX Toolbox” *Proceedings of the 15th ACM International Conference on Computing Frontiers*. Ischia, Italy. May 2018. DOI: 10.1145/3203217.3205338
- C. Silvano, G. Agosta, S. Cherubin, D. Gadioli, G. Palermo, A. Bartolini, L. Benini, J. Martinovič, M. Palkovič, K. Slaninová, J. Bispo, J. M. P. Cardoso, R. Abreu, P. Pinto, C. Cavazzoni, N. Sanna, A. Beccari, R. Cmar, E. Rohou. “The ANTAREX approach to autotuning and adaptivity for energy efficient HPC systems” *Proceedings of the ACM International Conference on Computing Frontiers*. Pages 288-293. Como, Italy. May 2016. DOI: 10.1145/2903150.2903470
 - S. Cherubin, G. Agosta, I. Lasri, E. Rohou, O. Sentieys. “Implications of Reduced-Precision Computations in HPC: Performance, Energy and Error” *Proceedings of the International Conference on Parallel Computing (ParCo)*. Bologna, Italy. Sep 2017. ISBN: 978-1-61499-842-6
 - C. Silvano, A. Bartolini, A. Beccari, C. Manelfi, C. Cavazzoni, D. Gadioli, E. Rohou, G. Palermo, G. Agosta, J. Martinovič, J. Bispo, J. M. P. Cardoso, J. Barbosa, K. Slaninová, L. Benini, M. Palkovič, N. Sanna, P. Pinto, R. Cmar, R. Nobre, S. Cherubin. “The ANTAREX Tool Flow for Monitoring and Autotuning Energy Efficient HPC Systems” *SAMOS 2017 - International Conference on Embedded Computer Systems: Architecture, Modeling and Simulation*. Pythagorion, Greece. Jul 2017.

Workshop Publications with Published Proceedings

- G. Magnani, L. Denisov, D. Cattaneo, G. Agosta, S. Cherubin “Precision Tuning the Rust Memory-Safe Programming Language” *Proceedings of the 15th Workshop on Parallel Programming and Run-Time Management Techniques for Many-Core Architectures and 13th Workshop on Design Tools and Architectures for Multicore Embedded Computing Platforms*. Munich, Germany. 2024. DOI: 10.4230/OASICS.PARMA-DITAM.2024.4
- D. Cattaneo, G. Magnani, S. Cherubin, G. Agosta “Ahead-Of-Real-Time (ART): A Methodology for Static Reduction of Worst-Case Execution Time” *Third Workshop on Next Generation Real-Time Embedded Systems (NG-RES 2022)*. Budapest, Hungary. Jun 2022. DOI: 10.4230/OASICS.NG-RES.2022.4
- N. Fossati, D. Cattaneo, M. Chiari, S. Cherubin, G. Agosta “Automated Precision Tuning in Activity Classification Systems: A Case Study” *Proceedings of the 11th Workshop on Parallel Programming and Run-Time Management Techniques for Many-core Architectures and the 9th Workshop on Design Tools and Architectures For Multicore Embedded Computing Platforms*. Bologna, Italy. Jan 2020. DOI: 10.1145/3381427.3381432
- D. Cattaneo, A. Di Bello, M. Chiari, S. Cherubin, G. Agosta “POSTER: Fixed Point Exploitation via Compiler Analyses and Transformations” *Proceedings of the 16th conference on Computing Frontiers (CF 19)*. April 2019. **Best poster award**. DOI: 10.1145/3310273.3323424
- M. Festa, N. Gervasoni, S. Cherubin, G. Agosta “Continuous Program Optimization via Advanced Dynamic Compilation Techniques” *Proceedings of the 10th Workshop on*

Parallel Programming and Run-Time Management Techniques for Many-core Architectures and the 8th Workshop on Design Tools and Architectures For Multicore Embedded Computing Platforms. Valencia, Spain. Jan 2019. DOI: 10.1145/3310411.3310415

- S. Cherubin, C. Borrelli, M. Zanoni, M. Buccoli, A. Sarti, S. Tubaro “Three-Dimensional Mapping of High-Level Music Features for Music Browsing” *2019 International Workshop on Multilayer Music Representation and Processing (MMRP)*. Milano, Italy. Jan 2019. DOI: 10.1109/MMRP.2019.8665368
- R. Nobre, L. Reis, J. Bispo, T. Carvalho, J. M. P. Cardoso, S. Cherubin, G. Agosta. “Aspect-Driven Mixed-Precision Tuning Targeting GPUs” *Proceedings of the 9th Workshop on Parallel Programming and Run-Time Management Techniques for Many-core Architectures and the 7th Workshop on Design Tools and Architectures For Multicore Embedded Computing Platforms*. Manchester, England, United Kingdom. Jan 2018. DOI: 10.1145/3183767.3183776
- S. Cherubin, M. Scandale, G. Agosta. “Stack Size Estimation on Machine-Independent Intermediate Code for OpenCL Kernels” *Proceedings of the 7th Workshop on Parallel Programming and Run-Time Management Techniques for Many-core Architectures and the 5th Workshop on Design Tools and Architectures For Multicore Embedded Computing Platforms*. Pages 1-6. Prague, Czech Republic. Jan 2016. DOI: 10.1145/2872421.2872425
- C. Bolchini, S. Cherubin, G. C. Durelli, S. Libutti, A. Miele, M. D. Santambrogio. “A Runtime Controller for OpenCL Applications on Heterogeneous System Architectures” *Proceedings of the Embedded Operating Systems Workshop co-located with the Embedded Systems Week (ESWEEK 2016)*. Pittsburgh PA, USA, October 2016.

Service Activities

- 2026 **Program Committee member**, *DATE conference – Track D9 (Low-power, energy-efficient and thermal-aware design)*, Verona, Italy
www.date-conference.com
- 2025 **Program Committee member**, *DATE conference – Track D9 (Low-power, energy-efficient and thermal-aware design)*, Lyon, France
www.date-conference.com
- 2023 **Program Committee member**, *Euro-Par – track 1 (Programming, Compilers, and Performance)*, Limassol, Cyprus
<https://2023.euro-par.org>
- 2025 **Steering Committee**, *PARMA-DITAM workshop*, Munich, Germany
<https://parma-ditam-workshop.github.io>
- 2024 **Steering Committee**, *PARMA-DITAM workshop*, Munich, Germany
<https://parma-ditam-workshop.github.io>
- 2023 **General Chair**, *PARMA-DITAM Workshop*, Toulouse, France
<https://parma-ditam-workshop.github.io>
- 2022 **General Chair**, *PARMA-DITAM Workshop*, Budapest, Hungary
<https://parma-ditam-workshop.github.io>
- 2021 **Program Co-Chair**, *PARMA-DITAM Workshop*, Budapest, Hungary
<https://parma-ditam-workshop.github.io> (virtual event)
- 2020 **Organization Committee**, *PARMA-DITAM Workshop*, Bologna, Italy
<https://parma-ditam-workshop.github.io>
- 2021 **Guest Editor**, *Journal of Electronics Special Issue Advanced Technologies in Intelligent Computer System Architecture*, MDPI
<https://mdpi.com/si/65354>
- 2019 **Program Committee**, *Junior Researcher Workshop on Real-Time Computing*, Toulouse, France
<https://www.irit.fr/rtns2019/jrwrtc/>
- Apr 2017 **Organization Committee**, *LLVM Developers' Social Meeting - Italy*, Milano, Italy
<https://www.deib.polimi.it/ita/eventi/dettagli/1272>
- 2019 – 2022 **Reviewer of scientific articles**, *SoftwareX*, Elsevier
- 2018 **Reviewer of scientific articles**, *Microprocessors and Microsystems*, Elsevier

- 2018 - 2020 **Sub-reviewer of scientific articles**, *DATE conference*
Track A1: Power efficient and Sustainable Computing
- 2018 - 2020 **Sub-reviewer of scientific articles**, *DAC - Design Automation Conference*
Track: EDA3. Cross-Layer Power Analysis and Low-Power Design
- 2018 **Sub-reviewer of scientific articles**, *Architecture of Computing Systems conference*

Supervision activities

- 2021 – 2023 **Supervisor**, *MSc Thesis*, Edinburgh Napier University
PG students
- 2022 – 2023 **Supervisor**, *Hons Projects*, Edinburgh Napier University
UG students
- 2018 – 2021 **Co-supervisor**, *MSc Thesis*, Politecnico di Milano
PG students

Associations

- FSTN Formula Student Team Napier. *Faculty advisor* of the Formula Student AI driverless group. 2023.
- ACM Member 2021 → now. www.acm.org
- IEEE Member 2020 → 2021. Student Member 2018→ 2019. www.ieee.org
- HiPEAC Member 2020 → now of European Network of Excellence on High Performance and Embedded Architecture and Compilation. Affiliate Member 2015 → 2020. www.hipeac.net
- POuL Member of Politecnico Open unix Labs association (www.poul.org). 2013 → 2019. Promoting free software among the university through divulgative talks and events (www.youtube.com/user/POuLpolimi).
- Poli.Radio Speaker for *Hack Generation* (was weekly on air on www.poliradio.it). Mar 2014 → Jul 2014. Talking about news from hacker's perspective. Held by a selection of POuL members.

Summer/Winter Schools

- Sep 2021 **ACACES Summer School**, *HiPEAC*, Fiuggi, Italy
- Jul 2020 **ACACES Summer School**, *HiPEAC*, On-Line virtual event
- Jul 2019 **ACACES Summer School**, *HiPEAC*, Fiuggi, Italy
- Sep 2018 **NiPS Summer School**, *NiPS*, Perugia, Italy
- Jul 2018 **ACACES Summer School**, *HiPEAC*, Fiuggi, Italy
- Jul 2017 **ACACES Summer School**, *HiPEAC*, Fiuggi, Italy
- Jul 2016 **ACACES Summer School**, *HiPEAC*, Fiuggi, Italy

Courses & Certifications

- Nov 2025 **Abilitazione Scientifica Nazionale (ASN)**, *Italian Minister of Higher Education & Research*
09/H1 II fascia – Valid up to Nov 2037.
- Feb 2023 **Fellowship of Higher Education Academy (FHEA)**, *UKPSF*
Reference Number PR258524
- Jan 2020 **Engaging Students in Active Learning**, *Politecnico Open Knowledge - Politecnico di Milano*
licence n° 6a350f7f34a74b3fb441f5d54f598b33 (link)
- Dec 2019 **Being a researcher (in Information Science and Technology)**, *Politecnico Open Knowledge - Politecnico di Milano*
licence n° 7e0adc7d7537406ea024fea34d84d874 (link)
- Jan 2016 **Working in Multidisciplinary Teams**, *Politecnico Open Knowledge - Politecnico di Milano*
licence n° ce70aa674dac4b2db0f87c20258e39b6 (link)
- Jan 2016 **Managing Changes**, *Politecnico Open Knowledge - Politecnico di Milano*
licence n° ae90ec0e323a4130a4f79bc0bc18b390 (link)
- Jan 2016 **Managing Conflicts**, *Politecnico Open Knowledge - Politecnico di Milano*
licence n° 55d44fb0457c42f89df71b3cdcabecf9(link)
- May 2006 **ECDL Core**, *AICA (Associazione italiana per l'Informatica e il Calcolo Automatico)*, Milan

Computer skills

OS	GNU/Linux	
Programming	C, C++	<i>high proficiency</i>
	Java, bash	<i>working proficiency</i>
Compiler	LLVM	
Version Control	git	
Vector Graphics	Inkscape	

Personal profile

Driving License	B	<i>EU/Italian car driving license</i>
Currently based	Trondheim, Norway	