Angelo Ferrando

angelo.ferrando@dibris.unige.it | Via Fado 78A | 3421761217

EDUCATION

UNIVERSITY OF GENOVA

BS in Computer Science with honors
September 2010 - July 2013 |
University of Genova

MS in Computer Science with honors
September 2013 - October 2015 |
University of Genova

PhD in Computer Science
November 2015 - November 2018 |
University of Genova

LINKS

https://angeloferrando.github.io/website/
ResearchGate://**Angelo_Ferrando**
Linkedin://**Angelo_Ferrando**
ORCID: **0000-0002-8711-4670**

COURSEWORK

GRADUATE

Computer and Network Security
Computer Vision
Computer Graphics
Implementation of Programming
Languages
Software System Design
Intelligent System
Machine Learning
Computational Intelligence
Computer-Aided Verification
Parallel Computing
Programming Paradigms

UNDERGRADUATE

Algorithms and Data Structures
Object-Oriented Languages using Java
and C#
Database
Concurrent Programming
Web application development
Processing systems and transmission
Software Engineering

SKILLS

PROGRAMMING

Over 5000 lines:
C • C++ • Java • C# • MySQL •
PHP • LaTeX • Prolog • HTML
Over 1000 lines:
Shell • CSS • JavaScript •
Familiar:
Python • Android • Matlab • Haskell

WORK EXPERIENCE

SIMULATION TEAM

October 2012 - May 2014 |
Via Luigi Cadorna, 2, 17100 Savona Province of Savona, Italy
Software Developer in Modeling and Simulation context
I was actively involved in the development of an optimizer integrated in a simulation tool for the Early-Phase evaluation of new vessels. I was active in the development of simulation models for contract ongoing between MAST and OSN (FINCANTIERI and FINMECCANICA joint-venture). I was actively involved in a project for Modeling UAV in counter-insurgency and in the integration IA-CFG UCOIN project; in this project intelligent agents are used to simulate complex UAV activities integrated with joint operations over a North-African scenario. I had experience in Virtual Modeling with VEGA Prime and Multigen Creator.

PROJECTS

SMART ROGAINING

February 2018 - May 2018 |
Commissioned by Luca Gelati
(`https://www.linkedin.com/in/luca-gelati-5b30b038/`)
Webapp for team building
Development of a webapp for supporting team building experiences. The app is used to guide the players inside the game and allows interacting with a set of interesting points positioned on the map.

PORTBOT   April 2018 - present |

Commissioned by CIPI (`http://www.cipi.unige.it`)
Chatbot for the port of Genova
Development of a chatbot for supporting the call center of the port of Genova. The chatbot answers to generic and specific questions concerning the situation inside the port. The objective of this work is to have support off the clock, since the call center is not a 24h/24h service. The framework used for developing such kind of chatbot is called Dialogflow (`http://dialogflow.com/`).

QUEIROLO & ASS.   January 2018 - present |

Commissioned by Queirolo & ass. (`http://www.queirolo.eu`)
Video and Auto expertises
Development of a progressive webapp for supporting video and auto expertise for an insurance adjuster agency in Genova. The app is divided in two parts: Video and Auto. The video part allows the insurance adjuster to communicate directly with the client through a video chat. During this communication, the app supports also the exchange of information and datas to support the negotiation. The auto part allows the client to insert the datas relating to the damage in order to speed up the negotiation.

LANGUAGE KNOWLEDGE

FIRST CERTIFICATE IN ENGLISH (FCE) LEVEL B2.

ORGANIZATIONAL SKILLS

I am able to organize my own goals and I have demonstrated in the workplace to be able to handle even the work of others. During my

life I had to manage different situations in which it was required to be able to take decisions independently.

DRIVING LICENSE

B LICENSE

HONORS AND AWARDS

- Special mention for the Master's thesis: *"Trace expressions for runtime verification and protocol-driven behaviour"*.

OTHER ACTIVITIES

STUDY ABROAD

- 2 months at the University of Liverpool (Jan - Feb 2017)
- 1 month at the University of Lancaster (Feb - Mar 2018)
- 3 months at the University of Otago (July - Oct 2018)

ORGANIZATION

- Local organizer at the 15th International Conference of the Italian Association for Artificial Intelligence, Genova.

PHD SCHOOLS

- Bertinoro International Spring School 2016 (BISS 2016)
- 12th Summer School on Modelling and Verification of Parallel Processes, (MOVEP 2016)
- 18th European Agent Systems Summer School (EASSS 2016)

COMPETITIONS

- International Cultural and Academic Meeting of Engineering Students (ICAMES 2013)
- NASA - Simulation Exploration Experience (SEE 2013)
- NASA - Simulation Exploration Experience (SEE 2014)

CONFERENCES

- 2018
    - The 17th Autonomous Agents And MultiAgent Systems International Conference (AAMAS), Stockholm (Sweden)
    - The 18th International conference on Runtime Verification
- 2017
    - The 16th Autonomous Agents And MultiAgent Systems International Conference (AAMAS), São Paulo (Brazil)
- 2016
    - The Luxembourg BabelNet Workshop
    - The 15th Autonomous Agents And MultiAgent Systems International Conference (AAMAS), Singapore
    - Theory and Practice of Formal Methods, Frank de Boer's 60th birthday, Eindhoven (the Netherlands)
    - The 17th Workshop "dagli Oggetti agli Agenti", Catania (Italy)
    - The 1st VORTEX Workshop on Runtime Verification (ECOOP), Roma
    - The 15th International Conference of the Italian Association for Artificial Intelligence, Genova (Italy)

- 2015
  - Convegno Italiano di Logica Computazionale (CILC 2015), Genova (Italy)
  - Principles and Practice of Multi-Agent Systems (PRIMA 2015), Bertinoro (Italy)
  - The Sixth International Symposium on Games, Automata, Logics and Formal Verification (GANDALF 2015), Genova (Italy)

RESEARCH & WORK

**UNIVERSITY OF GENOVA |
SOFTWARE ENGINEERING & PROGRAMMING LANGUAGES
RESEARCH GROUP**
November 2015 - November 2018 | Genova, Italy
PhD Student.

**UNIVERSITY OF LIVERPOOL |
AUTONOMY & VERIFICATION LAB**
December 2018 - present | Liverpool, Merseyside, UK
Postdoctoral Research Associate

References

[1] F. Aielli, D. Ancona, P. Caianiello, S. Costantini, G. D. Gasperis, A. D. Marco, A. Ferrando, and V. Mascardi. FRIENDLY & KIND with your health: Human-friendly knowledge-intensive dynamic systems for the e-health domain. In J. Bajo, M. J. Escalona, S. Giroux, P. Hoffa-Dabrowska, V. Julián, P. Novais, N. S. Pi, R. Unland, and R. A. Silveira, editors, *Highlights of Practical Applications of Scalable Multi-Agent Systems. The PAAMS Collection - International Workshops of PAAMS 2016, Sevilla, Spain, June 1-3, 2016. Proceedings*, volume 616 of *Communications in Computer and Information Science*, pages 15–26. Springer, 2016.

[2] D. Ancona, D. Briola, A. Ferrando, and V. Mascardi. Global protocols as first class entities for self-adaptive agents. In G. Weiss, P. Yolum, R. H. Bordini, and E. Elkind, editors, *Proceedings of the 2015 International Conference on Autonomous Agents and Multiagent Systems, AAMAS 2015, Istanbul, Turkey, May 4-8, 2015*, pages 1019–1029. ACM, 2015.

[3] D. Ancona, D. Briola, A. Ferrando, and V. Mascardi. Runtime verification of fail-uncontrolled and ambient intelligence systems: A uniform approach. *Intelligenza Artificiale*, 9(2):131–148, 2015.

[4] D. Ancona, D. Briola, A. Ferrando, and V. Mascardi. Mas-drive: a practical approach to decentralized runtime verification of agent interaction protocols. In C. Santoro, F. Messina, and M. D. Benedetti, editors, *Proceedings of the 17th Workshop "From Objects to Agents" co-located with 18th European Agent Systems Summer School (EASSS 2016), Catania, Italy, July 29-30, 2016.*, volume 1664 of *CEUR Workshop Proceedings*, pages 35–43. CEUR-WS.org, 2016.

[5] D. Ancona, A. Ferrando, L. Franceschini, and V. Mascardi. Parametric trace expressions for runtime verification of java-like programs. In *Proceedings of the 19th Workshop on Formal Techniques for Java-like Programs, Barcelona , Spain, June 20, 2017*, pages 10:1–10:6. ACM, 2017.

[6] D. Ancona, A. Ferrando, L. Franceschini, and V. Mascardi. Coping with bad agent interaction protocols when monitoring partially observable multiagent systems. In Y. Demazeau, B. An, J. Bajo, and A. Fernández-Caballero, editors, *Advances in Practical Applications of Agents, Multi-Agent Systems, and Complexity: The PAAMS Collection - 16th International Conference, PAAMS 2018, Toledo, Spain, June 20-22, 2018, Proceedings*, volume 10978 of *Lecture Notes in Computer Science*, pages 59–71. Springer, 2018.

[7] D. Ancona, A. Ferrando, L. Franceschini, and V. Mascardi. Managing bad aips with rivertools. In Y. Demazeau, B. An, J. Bajo, and A. Fernández-Caballero, editors, *Advances in Practical Applications of Agents, Multi-Agent Systems, and Complexity: The PAAMS Collection - 16th International Conference, PAAMS 2018, Toledo, Spain, June 20-22, 2018, Proceedings*, volume 10978 of *Lecture Notes in Computer Science*, pages 296–300. Springer, 2018.

[8] D. Ancona, A. Ferrando, and V. Mascardi. Comparing trace expressions and linear temporal logic for runtime verification. In E. Ábrahám, M. M. Bonsangue, and E. B. Johnsen, editors, *Theory and Practice of Formal Methods - Essays Dedicated to Frank de Boer on the Occasion of His 60th Birthday*, volume 9660 of *Lecture Notes in Computer Science*, pages 47–64. Springer, 2016.

[9] D. Ancona, A. Ferrando, and V. Mascardi. Parametric runtime verification of multiagent systems. In K. Larson, M. Winikoff, S. Das, and E. H. Durfee, editors, *Proceedings of the 16th Conference on Autonomous Agents and MultiAgent Systems, AAMAS 2017, São Paulo, Brazil, May 8-12, 2017*, pages 1457–1459. ACM, 2017.

[10] D. Ancona, A. Ferrando, and V. Mascardi. Agents interoperability via conformance modulo mapping. In M. Cossentino, L. Sabatucci, and V. Seidita, editors, *Proceedings of the 19th Workshop "From Objects to Agents", Palermo, Italy, June 28-29, 2018.*, volume 2215 of *CEUR Workshop Proceedings*, pages 109–115. CEUR-WS.org, 2018.

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[12] A. G. Bruzzone, L. Dato, and A. Ferrando. Simulation exploration experience: Providing effective surveillance and defense for a moon base against threats from outer space. In *18th IEEE/ACM International Symposium on Distributed Simulation and Real Time Applications, DS-RT 2014, Toulouse, France, October 1-3, 2014*, pages 121–126. IEEE Computer Society, 2014.

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[16] A. Ferrando. Automatic partitions extraction to distribute the runtime verification of a global specification. In V. Mascardi and I. Torre, editors, *Proceedings of the Doctoral Consortium of AI*IA 2016 co-located with the 15th International Conference of the Italian Association for Artificial Intelligence (AI*IA 2016), Genova, Italy, November 29, 2016.*, volume 1769 of *CEUR Workshop Proceedings*, pages 40–45. CEUR-WS.org, 2016.

[17] A. Ferrando, D. Ancona, and V. Mascardi. Monitoring patients with hypoglycemia using self-adaptive protocol-driven agents: A case study. In M. Baldoni, J. P. Müller, I. Nunes, and R. Zalila-Wenkstern, editors,

Engineering Multi-Agent Systems - 4th International Workshop, EMAS 2016, Singapore, Singapore, May 9-10, 2016, Revised, Selected, and Invited Papers, volume 10093 of Lecture Notes in Computer Science, pages 39–58. Springer, 2016.

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[23] M. Massei, S. Poggi, A. Tremori, and A. Ferrando. Innovative models for supporting operational planning. IJSPM, 9(3):181–194, 2014.

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