Angelo Ferrando

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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 - March 2019 | 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

SKILLS

PROGRAMMING

Software Engineering

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

UNIVERSITY OF GENOVA | DIBRIS

March 2021 - present | Genova, Liguria, Italy Research Fellow

UNIVERSITY OF MANCHESTER | AUTONOMY & VERIFICATION LAB

July 2020 - February 2021 | Manchester, Greater Manchester, UK Postdoctoral Research Associate

UNIVERSITY OF LIVERPOOL | AUTONOMY & VERIFICATION LAB

December 2018 - July 2020 | Liverpool, Merseyside, UK Postdoctoral Research Associate

UNIVERSITY OF GENOVA | SOFTWARE ENGINEERING & PROGRAMMING LANGUAGES RESEARCH GROUP

November 2015 - March 2019 | Genova, Liguria, Italy PhD Student.

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 - February 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 - December 2018 |

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 - January 2019 | 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

BLICENSE

HONORS AND AWARDS

- 1st place in the Multi-Agents Programming Contest, 2019.
- Best Paper Award at the 7th International Workshop on Engineering Multi-Agent Systems (EMAS 2019).
- 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

- Organiser of the First Workshop on Agents and Robots for reliable Engineered Autonomy (AREA), ECAI 2020.
- Local organiser 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)

References

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- [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.
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- [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.
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- [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.
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