

ALLEGATO B

UNIVERSITÀ DEGLI STUDI DI MILANO

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[ANDREA LOREGGIA] CURRICULUM VITAE

INFORMAZIONI PERSONALI (NON INSERIRE INDIRIZZO PRIVATO E TELEFONO FISSO O CELLULARE)

COGNOME	LOREGGIA
NOME	ANDREA
DATA DI NASCITA	[06, 05, 1977]

Andrea Loreggia

Education

- 2013–2016 **PhD in Computer Science**, *The University of Padova - Italy*, Doctoral School in Mathematical Sciences.
Thesis: *"Iterative Voting, Control and Sentiment Analysis"*.
Supervisor: prof. Francesca Rossi
- 2010–2012 **Masters of Computer Science**, *The University of Padova - Italy*, Department of Mathematics, 110/110 cum laude.
Thesis: *"Iterative voting and multi-mode control in preference aggregation"*.
Supervisors: prof. Francesca Rossi and prof. Piotr Faliszewski
- 2006–2010 **Bachelor of Computer Science**, *The University of Padova - Italy*, Department of Mathematics.
Thesis: *"Simulations, Validation and Optimization of experimental clinical design: integration and software development"*.
Supervisors: prof. Tullio Vardanega and Mattia Veronese

Working Experiences

- 2016 - Today **Postdoc**, UNIVERSITY OF PADOVA, Padova.
"Safety constraints and ethical principles in collective decision making systems". Under the supervision of prof. Francesca Rossi we are studying new formalisms of knowledge representation and reasoning to model ethical principles in artificial agents. Designing and implementing experimental evaluations of the proposed models.
- 2014 - Today **CFO**, ISTITUTO GALILEO FERRARIS SRL, Padova.
Partner and Head of the administration office.
- 2005 - Today **CEO**, HIT SRL, Padova.
Human resources and customers needs management. Main areas of interest: privacy legislation compliance, IT infrastructure management, cloud migration, IT solutions and integrations.
- 2005 - 2016 **Teacher**, ISTITUTO GALILEO FERRARIS SRL, Padova.
High school teacher of Computer Science and Programming Languages.
- 2015 **Intern**, IBM RESEARCH, Yorktown Heights - New York - USA.
Visiting research under the supervision of Murray Campbell and Vijay Saraswat. Developed a new method to train a convolutional neural network to predict the working solver to be used in an algorithm portfolio.
- 2013 **Visiting student**, NICTA, Sydney - Australia.
Visiting research under the supervision of prof. Toby Walsh to design social choice models and implement experiments.

- 2002 - 2005 **Network Security Consultant**, PRIMEUR, Padova.
IT Security Project Manager. Most important experiences in: Firewall Consolidation, planning, Network Security Infrastructure implementation and delivering, reverse proxy, mail relay, IDS, LDAP infrastructure for centralize authentication.
- 2000 - 2002 **Network Security Consultant**, ISS, Padova.
IT Security Project Manager.

Publications

Book Chapters

- 2018 A. Loreggia, N. Mattei, F. Rossi, and K. B. Venable. 2018. **Value Alignment Via Tractable Preference Distance**. In Artificial Intelligence Safety and Security, R. V. Yampolskiy (Ed.). CRC Press.

Refereed Journal Publications

- 2015 Umberto Grandi, Loreggia A, Francesca Rossi, Vijay A. Saraswat (2015). **A Borda count for collective sentiment analysis**. ANNALS OF MATHEMATICS AND ARTIFICIAL INTELLIGENCE, vol. 77, p. 281-302, ISSN: 1573-7470, doi: 10.1007/s10472-015-9488-0.
- 2014 Andrea Loreggia. **Iterative voting and multi-mode control in preference aggregation**. Intelligenza Artificiale 8 (2014) 3951. DOI 10.3233/IA-140059. IOS Press

Conference Proceedings

- 2018 Andrea Loreggia, Nicholas Mattei, Francesca Rossi and Kristen Brent Venable. **On the Distance Between CP-nets**. 17th International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2018)
- 2018 Andrea Loreggia, Nicholas Mattei, Francesca Rossi and Kristen Brent Venable. **Preferences and Ethical Principles in Decision Making**. 1st AAAI-ACM Conference on Artificial Intelligence, Ethics and Society (AIES 2018)
- 2018 Andrea Loreggia, Nicholas Mattei, Francesca Rossi and Kristen Brent Venable. **A Notion of Distance Between CP-nets**. AAAI - 11th Multidisciplinary Workshop on Advances in Preference Handling (M-PREF18)
- 2017 Andrea Loreggia, Nicholas Mattei, Francesca Rossi and Kristen Brent Venable. **A Notion of Distance Between CP-nets**. 26th International Joint Conference on Artificial Intelligence: Fifth International Workshop on Graph Structures for Knowledge Representation and Reasoning (GKR 2017)
- 2017 Andrea Lorreggia, Francesca Rossi, Kristen Brent Venable. **Modeling Ethical Theories Compactly**. 31th AAAI Conference on Artificial Intelligence: 3rd International Workshop on AI, Ethics and Society
- 2016 Andrea Lorreggia, Horst Samulowitz, Yuri Malitsky, Vijay Saraswat. **Deep Learning for Algorithm Portfolios**. 30th AAAI Conference on Artificial Intelligence
- 2015 Andrea Loreggia, Nina Narodytska, Francesca Rossi, K. Brent Venable, Toby Walsh. **Controlling Elections by Replacing Candidates or Votes**. 14th International Conference on Autonomous Agents and Multiagent Systems

- 2014 Umberto Grandi, Andrea Loreggia, Francesca Rossi, Vijay Saraswat. **From Sentiment Analysis to Preference Aggregation.** ISAIM 2014 special session on computational social choice
- 2013 Umberto Grandi, Andrea Loreggia, Francesca Rossi, Kristen Brent Venable and Toby Walsh. **Restricted Manipulation in Iterative Voting: Condorcet Efficiency and Borda Score.** In Proceedings of the 3rd International Conference on Algorithmic Decision Theory, November 2013
- 2013 Umberto Grandi, Andrea Loreggia, Francesca Rossi, Kristen Brent Venable and Toby Walsh. **Restricted Manipulation in Iterative Voting: Condorcet Efficiency and Borda Score.** In Proceedings of the 7th Multidisciplinary Workshop on Advances in Preference Handling, August 2013
- 2013 Mattia Veronese, Stefano Zamuner, Andrea Loreggia, Alessandra Bertoldo. **Aodware: a model-based application for optimal and adaptive optimal experimental design exploration.** American Conference on Pharmacometrics 2013. Ft.Lauderdale, Florida.(poster presentation)

International Schools

Future Events

- 2019 **Dagstuhl Seminar 19381**, *"Application-Oriented Computational Social Choice"*, Dagstuhl, Germany.

Past Events

- 2019 **Centre for Advanced Studies, Joint Research Centre, European Commission**, *"HUMAIN Winter school on AI and its ethical, legal, social and economic (ELSE) impact"*, Sevilla, Spain.
- 2019 **Co-Located with AAAI-19 - Kilauea volcanic site, Hawaii County Emergency Response Facilities, and University of Hawaii Hilo**, *"Artificial Intelligence for Natural Disasters"*, Hawaii, USA.
- 2017 **Dagstuhl Seminar 17261**, *"Voting: Beyond Simple Majorities and Single-Winner Elections"*, Dagstuhl, Germany.
- 2014 **Caen Summer School**, *"Interdisciplinary Analysis of Voting Rules"*, Caen, France.
- 2014 **Eisenhardt Castle in Bad Belzig**, *"Workshop on Challenges in Algorithmic Social Choice"*, Bad Belzig, Germany.
- 2013 **Lipari International Summer School**, *"Computational Social Science: Big Data"*, Lipari, Italy.

Teaching

My teaching activity has been carried out in the areas of Fundamentals of Computer Science and Artificial Intelligence. I have taught courses for the Undergraduate Curriculum in Computer Science at University of Padova, and for the Undergraduate Curriculum in Computer Engineering at University of Padova, and the Graduate Curriculum in Computer Science of University of Padova. Below I give a detailed list of the courses I have been involved with, organized in academic years.

2018-2019 **Spring Semester**

Intelligent Systems, *Graduate Curriculum in Information Engineering*, University of Padova, Chair: prof. Maria Silvia Pini.

Introduction to Artificial Intelligence, *Undergraduate Curriculum in Information Engineering*, University of Padova, Co-Chair with prof. Loris Nanni.

2018-2019 **Fall Semester**

Fundamentals of Computer science, *Undergraduate Curriculum in Engineering and management*, University of Padova, Chair: prof. Maria Silvia Pini.

2017-2018 **Spring Semester**

Artificial Intelligence, *Graduate Curriculum in Computer Science*, University of Padova, Chair: prof. Maria Silvia Pini.

Introduction to Artificial Intelligence, *Undergraduate Curriculum in Information Engineering*, University of Padova, Chair: prof. Silvana Badaloni.

2017-2018 **Fall Semester**

Fundamentals of Computer science, *Undergraduate Curriculum in Engineering and management*, University of Padova, Chair: prof. Maria Silvia Pini.

Fundamentals of Computer science, *Undergraduate Curriculum in Engineering and management*, University of Padova, Chair: prof. Giuseppe Satta.

2016-2017 **Web Technologies**, *Undergraduate Curriculum in Computer Science*, University of Padova, Chair: prof. Ombretta Gaggi.

2012-2013 **Computer Systems 1**, *Undergraduate Curriculum in Statistics for Economics and Business*, University of Padova, Chair: prof. Massimo Maresca.

2008-2009 **Fundamentals of Computer science.**, *Undergraduate Curriculum in Computer Engineering.*, University of Padova, Chair: prof. Laura Bazzanella.

Activities

Invited mentor at SP-AIES 2019.

PC-member: AAMAS 2019, SP-AIES 2019, AIES 2019, AAAI 2019, ECAI2016, IJCAI 2015, AAAI-2015, AAAI-2014.

Sub-reviewer: AAMAS 2017, AAAI 2016, TARK 2015, PLDI 2014.

Reviewer for Annals of Mathematics and Artificial Intelligence, NeuroComputing.

Co-chair of the AI*IA 2014 Doctoral Consortium.

IJCAI-13 Student Volunteer Program in Beijing, China.

IJCAI-11 Student Volunteer Program in Barcelona, Spain.

Talks

2018 **On the Distance Between CP-nets**. Stockholm, Sweden, AAMAS 2018

2018 **Preferences and Ethical Principles in Decision Making**. New Orleans - AIES 2018

2018 **A Notion of Distance Between CP-nets**. New Orleans - AAAI 2018

- 2017 **Knowledge Reasoning: Towards a Combined Approach for Explainable Decision Making.** IBM T.J.Watson, New York
- 2017 **Modeling Ethical Theories Compactly.** San Francisco - AAAI 2017
- 2016 **Deep Learning for Algorithm Portfolios.** Phoenix - AAAI 2016
- 2015 **Deep Learning for Algorithm Portfolios.** Yorktown Heights - IBM Research
- 2014 **From sentiment analysis to preference aggregation.** Bad Belzig - CASC 2014.
- 2014 **Controlling elections by replacing candidates for plurality and veto: theoretical and experimental results.** Paris - EXPLORE 2014
- 2014 **Beneficial Strategic Reasoning in Iterative Voting. 1st Workshop on Iterative Voting and Voting Games.** Padova
- 2013 **Iterative voting and multi-mode control in preference aggregation.** Torino - AI*IA 2013
- 2013 **Restricted Manipulation in Iterative Voting: Condorcet Efficiency and Borda Score.** Bruxelles - ADT 2013
- 2013 **Restricted Manipulation in Iterative Voting: Condorcet Efficiency and Borda score.** Beijing - MPREF 2013
- 2013 **Iterative voting and multi-mode control in preference aggregation.** Sydney - NICTA

Student Advising

A list of undergraduate students I have collaborated with and the topics that were jointly considered.

- 2017-2018 Emanuele Maruzzi, University of Padova - Department of Information Engineering. Sentiment Analysis: Application and state-of-the-art. Supervisor: prof. Maria Silvia Pini.
- Federico Anselmo Scremin, University of Padova - Department of Information Engineering. A Neural Network for Human Activity Recognition. Supervisor: prof. Maria Silvia Pini.

Attended Conferences

- 2019 **Thirty-third AAAI Conference on Artificial Intelligence.** Honolulu, Hawaii - USA.
- 2019 **Second AI Ethics and Society.** Honolulu, Hawaii - USA.
- 2018 **World Summit AI.** Gashouder, Amsterdam, Netherlands.
- 2018 **International Conference on Autonomous Agents and Multiagent Systems.** Stockholm, Sweden.
- 2018 **Thirty-second AAAI Conference on Artificial Intelligence.** New Orleans, Louisiana USA.
- 2017 **Thirty-first AAAI Conference on Artificial Intelligence.** San Francisco, California USA.
- 2016 **Thirtieth AAAI Conference on Artificial Intelligence.** Phoenix, Arizona USA.

- 2014 **Third Symposium of the Italian Association for Artificial Intelligence "Artificial Intelligence for Society and Economy"**. Pisa, Italy
- 2014 **Meeting of Cost Action IC1205 on Computational Social Choice**. Sibiu, Romania
- 2014 **Workshop on Challenges in Algorithmic Social Choice (CASC 2014)**. Bad Belzig, Germany
- 2014 **First Workshop on Exploring Beyond the Worst Case in Computational Social Choice (EXPLORE 2014)**. Paris, France
- 2014 **First Workshop on Iterative Voting and Voting Games**. Padova, Italy
- 2013 **Twelfth Conference of the Italian Association for Artificial Intelligence**. Turin, Italy
- 2013 **Third International Conference on Algorithmic Decision Theory**. Bruxelles, Belgium
- 2013 **Twenty-third International Conference on Artificial Intelligence**. Beijing, China

Awards

- 2014 National Award for "Best Thesis on Artificial Intelligence" of the Italian Association for Artificial Intelligence.
- 2010 Stage.it 2010 - Honorable mention of the judges for the "integration of knowledge and competences in research in complementary scientific areas".

Computer skills

Advanced JAVA, PYTHON, Keras, Deep Learning, PHP, C, C++, MATLAB, L^AT_EX, HTML, Computer Hardware and Support

Personal Skills

Team Leading, Problem Solving

Languages

English **Intermediate B2**
 Spanish **Basic**

Con conversationally fluent
Basic words and phrases only

Patents

- 2017 **Deep learning for algorithm portfolios** US 9547821 B1

Data

14/02/2019

Luogo

PADOVA