# CURRICULUM VITAE, LUCA MARIA GAMBARDELLA, 2021

Vice Rector for Innovation and Corporate Relations, USI,
Università della Svizzera italiana, Via Buffi 13, CH-6900, Lugano
Full Professor, Facoltà di scienze informatiche, USI
Dalle Molle Institute for Artificial Intelligence, USI-SUPSI, Lugano
Artificial Intelligence Master Director, Facoltà di scienze informatiche, USI
Co-Founder & CTO Head of Applied AI, Artificialy SA, Lugano
Phd in Engineering Sciences and Technology
MD Computer Science
luca.gambardella@usi.ch

**Professional Appointments:**

2020 - now   Vice Rector for Innovation and Corporate Relations, USI, Lugano
2020 - now   Co-Founder & CTO Head of Applied AI, Artificialy SA, Lugano
2016 - now   Director, Artificial Intelligence Master, Facoltà di scienze informatiche, USI, Lugano
2012 - 2020   Director, IDSIA, Dalle Molle Institute for Artificial Intelligence, USI-SUPSI, Manno
2012 - 2020   Director, SUPSI Master MSE Research Unit in Intelligent Systems, Manno
2007 - 2011   Director, Intelligent System Master, USI, Università della Svizzera italiana, Lugano
2001 - 2020   Chief Scientific Officer of AntOptima sa, a spin-off of IDSIA, Lugano
1995 - 2012   co-Director, IDSIA, Lugano-Manno
1988 - 1995   Research Director, IDSIA, Lugano

**Academic Appointments:**

2020 - now   Full Professor, Facoltà di scienze informatiche, USI, Lugano
2006 - 2020   Adjunct Professor, Facoltà di scienze informatiche, USI, Lugano
2003 - 2020   Professor SUPSI, Scuola universitaria professionale della Svizzera italiana, Manno
1992         Visiting Senior Scientist, the International Computer Science Institute, Berkeley, CA, USA

**Professional Preparation:**

2015         PhD in Engineering Sciences and Technology, ULB, École Polytechnique de Bruxelles, BE
1985         Master in Computer Science, Faculty of Informatics, University of Pisa, Italy

**Lectures (semester courses):**

2018 - now   Artificial Intelligence, Master of Artificial Intelligence, Facoltà di scienze informatiche, USI, Lugano
2006 - now   Artificial Intelligence, Bachelor in informatics, Facoltà di scienze informatiche, USI, Lugano
1998 - 2020   Advanced Algorithms, SUPSI Department of Technology and Innovation, Manno
2007 - 2020   Advanced Algorithms, PAP class, SUPSI Department of Technology and Innovation, Manno
2008 - 2010   Heuristics, Intelligent Systems Master, Facoltà di scienze informatiche, USI, Lugano
2006         Applications of Discrete Optimization, Master and PHD course, Milan Polytechnic

**Summary of Service and Other Professional Appointments:**

2015         President, the EURO Excellence in Practice Award EEPA 2015
2012 - 2015   President and Jury member, the EURO Excellence in Practice Award EEPA 2012-2013
2011 - 2017   President, the Swiss Operations Research Society (SVOR/ASRO)

**Research Interests:**
- Artificial Intelligence with focus on meta-heuristics, swarm intelligence and machine learning
- Robotics with focus on robotic swarms, mobile robots, drones and educational robotics

**Governing Activities:**
- ERC Consolidator Grant referee:  EU Commission Projects Evaluator
- EU Commission Expert for "Future Trends in Artificial Cognitive Systems".
- Swiss National Science Foundation evaluator.
- Research Grants Evaluators, Hong Kong, Torino, Ireland;  Inria, Expert for Inria evaluation, France
- CSEM, Neuchâtel, Scientific Advisory Board Member for Artificial Intelligence and Machine Learning

**Summary of Academic Leadership Activities:**
- He has been awarded more than 16.0 million CHF in research funding for his research lab, (including other labs and partners the total amounts to more than 61 million CHF)
- He has been awarded 26 Swiss National Science Foundation projects (20 as principal investigator), 7 European Projects, 15 CTI/Innosuisse Projects (13 as principal investigator), 1 Hasler Foundation Project, 10 Industrial projects (6 as principal investigator)
- Supervisor of 13 PhD theses (five in progress)

**Summary Of Scholarly Publications**:
- He has proposed and published several state of the art bio-inspired distributed optimization algorithms for the travelling salesman problem, the vehicle routing problem with time windows, the quadratic assignment problem, the sequential ordering problems, and the flexible job shop
- He has published more than 300 papers. The total number of citations to his papers is more than 58'000 (source: Google scholar). His h-number is 72

**Recent Awards:**
- HRI 2019 Best demo award and honorable mention for best video award, 2019
- SNF Optimus Agora Prize in 2018 for the project "Introducing People to Research in Robotics through an Extended Peer Community in Southern Switzerland"
- Special Swiss ICT Award 2016: IDSIA it represents one of the best research institutes at the international level in the field of bio-inspired artificial intelligence. (with Juergen Schmidhuber)
- "Watt d'Or", Swiss award for best energy projects 2015, category "Energy technologies", Scuola universitaria professionale della Svizzera italiana & Alpiq InTec Gruppe with project GridSense

**Patents:**
- Patent n.: 13181909.6 Method for recharging an accumulator of an electric vehicle.
- Patent. Sistema di guida di un drone. Patent PCT/IB2016/050192
- European Paten Nr. 16 200 826.2 EP3326749 "Surface Interpreter"

**Artistic Production:**
- "NeuralRope#1. Inside an Artificial Brain", with Alex Dorici. Pedestrian Tunnel Lugano-Besso.  An interactive permanent installation of 100m reproducing an Artificial Neural Networks, 2019
- "Illusa fingo sogni fasulli", 2020, Bellinzona. A black monolith where, through dreams and a digital dance accompanied by a female voice, the boundary between human and AI  is investigated.
- Published novels: "Sei vite" (Zerounoundici Ed., 2013), "Il suono dell'alba" (La Feluca Ed. 2019)