

Giorgio Giannone

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I am broadly interested in **Probabilistic Machine Learning**, Geometry and Perception, with a focus on **Deep Generative Modelling**. Curious about Probabilistic Agents and Causal Inference.

Education

PhD, Statistical Machine Learning

DTU, Copenhagen, Denmark

- Supervisor: Ole Winther; Co-supervisor: Søren Hauberg
- Few-Shot Generative Models

June 2020 - Present

Master's Degree, Data Science

Sapienza University, Rome, Italy

- Excellence Path & Summa cum Laude
- Thesis: Multimodal Learning for Scene Understanding
 - Researched on Semantic Segmentation and Depth estimation

Sept 2016 - Nov 2018

Master's Degree, Mechanical Engineering

Sapienza University, Rome, Italy

- Summa cum Laude
- Thesis: Bubble Dynamics in Turbulent Shear Flows
 - Post-processed a DNS to characterize Cavitation Models

Sept 2014 - Jan 2017

Bachelor's Degree, Mechanical Engineering

Sapienza University, Rome, Italy

- Thesis: Rapid prototyping of metallic manufacturing
 - Analysis of the state of the art regarding rapid prototyping techniques

Sept 2009 - May 2014

Experience

Research Engineer, NNAISENSE

Lugano, Switzerland

Structured Latent Variable Models

Jan 2019 - Jan 2020

- Research in Representation Learning and Perception

Machine Learning Engineer, Pi Campus

Rome, Italy

NLP for industrial applications

Oct 2018 - Dec 2018

Intern, argmax.ai, Data:Lab

Munich, Germany

Probabilistic Models for Perception

Sept 2018 - Oct 2018

- Prototyped a library for generative models

Research Intern, Naver Labs Europe

Grenoble, France

Computer Vision and Deep Learning for Scene Understanding

Feb 2018 - Aug 2018

- Developed a research paper and a patent

Intern, ViDA Lab

New York University, NY, USA

Analysis of Text Datasets based on Entities Retrieval

Sept 2017 - Jan 2018

- Built an interactive tool to investigate 10M documents

Co-Founder, SecretAIry (formerly GAiA)

Rome, Italy

Chatbots to enhance Workplace Communication

July 2017 - Jan 2019

- Selected among 100+ startups to participate in the EnLabs Incubator

Publications & Research Projects

\mathcal{T}_{VAE} - No Representation without Transformation	under-review
<i>Giannone, Saremi, Masci, Osendorfer</i>	<i>2020</i>
Input-filtering NeuralODEs for spiking data	arXiv
<i>Giannone, Anoosheh, Quaglino, D'Oro, Masci, Gallieri</i>	<i>2020</i>
No Representation without Transformation (short-version)	NeurIPS-W
<i>Giannone, Masci, Osendorfer</i>	<i>2019</i>
Learning Common Representation from RGB and Depth Images	CVPR-W
<i>Giannone, Chidlovskii</i>	<i>2019</i>

Conferences & Summer Schools

EEML 2020	Krakov, Poland
Deep Learning and Reinforcement Learning	<i>July 2020</i>
RegML 2020	Genova, Italy
Regularization Methods for Machine Learning	<i>July 2020</i>
NeurIPS 2019	Vancouver, Canada
Workshop presentations - BDL & PGR	<i>Dec 2019</i>
CVPR 2019	Long Beach, CA, USA
Workshop presentation - Multimodal Learning and Applications	<i>Jun 2019</i>
NeurIPS 2018	Montreal, Canada
Student Volunteer	<i>Dec 2018</i>
Zurich Summer School	ETH, Zurich, Switzerland
Uncertainty Quantification for PDEs	<i>Aug 2018</i>
Deep Learning Summer Program	Tsinghua University, Beijing, China
Participation Grant, 12% acceptance rate	<i>Jul 2018 - Aug 2018</i>
PAISS Summer School	Inria, Grenoble, France
Participation Grant and Volunteer	<i>Jul 2018</i>

Awards

Participation Grant, Perception as Generative Reasoning Workshop	NeurIPS 2019
Free conference registration	<i>Oct 2019</i>
Participation Grant, Pi School	Rome, Italy
Full tuition covered to participate in the School of Artificial Intelligence	<i>Oct 2018</i>
3% acceptance rate	
Certificate of Award, Tsinghua University	Beijing, China
Prize for outstanding accomplishments (Top 6)	<i>Aug 2018</i>
Certificate of Achievement, Naver Labs Europe	Grenoble, France
Prize for the best internship performance	<i>Jul 2018</i>
1st Pick, Excellence Path, Master's Degree, Data Science	Rome, Italy
Admission based on the first year's academic achievements	<i>Mar 2018</i>
Participation in activities at the School for Advanced Studies	

1st Place, Global AI Hackathon, Italian Edition

Our team built GAiA, a working assistant chatbot

We won three prizes: Challenge Microsoft, People's Choice, Product Market Fit

Rome, Italy

Jun 2017

Skills

Languages

- Python (proficient); R, Matlab (good knowledge); C, Java, JavaScript (basic knowledge)

Tools

- AWS, CUDA, CVX, Git, Linux, MongoDB, MySQL, NLTK, OpenCV, PyTorch, TensorFlow

Miscellaneous

Online Certified Education

- Machine Learning (Oct 2016), Deep Learning (Aug 2017) [Coursera]
- Computer Science (Nov 2016), Artificial Intelligence (Apr 2017) [edX]
- Self-Driving Cars Nanodegree, 1st term (Dec 2017) [Udacity]

Associations

- Italian Association for Machine Learning (IAML)
- ContinualAI