Giorgio Giannone

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github/georgosgeorgos

I am broadly interested in Probabilistic Machine Learning, Perception and Geometry, with a focus on **Deep Latent Variable Models**, **Few-Shot Generation**, **Transfer Learning** and **Diffusion Models**.

Education

PhD, Statistical Machine Learning — Technical University of Denmark, Lyngby, Denmark — *June 2020 - Present*

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

Master's Degree, Data Science — Sapienza University, Rome, Italy — *Sept 2016 - Nov 2018*

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

Master's Degree, Mechanical Engineering — Sapienza University, Rome, Italy — *Sept 2014 - Jan 2017*

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

Bachelor's Degree, Mechanical Engineering — Sapienza University, Rome, Italy — *Sept 2009 - May 2014*

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

Experience

Applied Science Intern, Amazon — Cambridge/London, UK — *July 2021 - Oct 2021*

Domain Agnostic Subpopulation Generalisation

Research Engineer, NNAISENSE — Lugano, Switzerland — *Jan 2019 - Jan 2020*

Structured Latent Variable Models

- Research in Representation Learning and Perception

Machine Learning Engineer, Pi Campus — Rome, Italy — *Oct 2018 - Dec 2018*

NLP for industrial applications

Intern, argmax.ai, Data:Lab — Munich, Germany — *Sept 2018 - Oct 2018*

Probabilistic Models for Perception

- Prototyped a library for generative models

Research Intern, Naver Labs Europe — Grenoble, France — *Feb 2018 - Aug 2018*

Computer Vision and Deep Learning for Scene Understanding

- Developed a research paper and a patent

Intern, ViDA Lab — New York University, NY, USA — *Sept 2017 - Jan 2018*

Analysis of Text Datasets based on Entities Retrieval

- Built an interactive tool to investigate 10M documents

Co-Founder, SecretAIry (formerly GAiA) — Rome, Italy — *July 2017 - Jan 2019*

Chatbots to enhance Workplace Communication

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

Publications & Research Projects

Just Mix Once: Mixing Samples with Implicit Group Distribution — under review
Giannone, Havrylov, Massiah, Yilmaz, Jiao — *2021*

Hierarchical Few-shot Generative Models — under review
Giannone, Winther — *2021*

Transformation-aware Variational Autoencoders — preprint
Giannone, Saremi, Masci, Osendorfer — *2020*

Input-filtering NeuralODEs for spiking data — NeurIPS-W
Giannone, Anoosheh, Quaglino, D'Oro, Masci, Gallieri — *2020*

No Representation without Transformation — NeurIPS-W
Giannone, Masci, Osendorfer — *2019*

Learning Common Representation from RGB and Depth Images — CVPR-W
Giannone, Chidlovskii — *2019*

Awards

Participation Grant, Perception as Generative Reasoning Workshop — NeurIPS 2019
Free conference registration — *Oct 2019*

Participation Grant, Pi School — Rome, Italy
Full tuition covered to participate in the School of Artificial Intelligence — *Oct 2018*
3% acceptance rate

Certificate of Award, Tsinghua University — Beijing, China
Prize for outstanding accomplishments (Top 6) — *Aug 2018*

Certificate of Achievement, Naver Labs Europe — Grenoble, France
Prize for the best internship performance — *Jul 2018*

1st Pick, Excellence Path, Master's Degree, Data Science — Rome, Italy
Admission based on the first year's academic achievements — *Mar 2018*
Participation in activities at the School for Advanced Studies

1st Place, Global AI Hackathon, Italian Edition — Rome, Italy
Our team built GAiA, a working assistant chatbot — *Jun 2017*
We won three prizes: Challenge Microsoft, People's Choice, Product Market Fit

Skills

Languages

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

Tools

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

Miscellaneous

Online Certified Education

- Coursera: Machine Learning (Oct 2016), Deep Learning (Aug 2017).
- edX: Computer Science (Nov 2016), Artificial Intelligence (Apr 2017), CS50 (Jan 2021), Math for Quantitative Finance (Oct 2021).
- Udacity: Self-Driving Cars Nanodegree, 1st term (Dec 2017).

Associations

- Italian Association for Machine Learning (IAML)
- ContinualAI