ALEJANDRO GARCÍA CASTELLANOS

EXPERIENCE

Ph.D. Candidate   Feb. 2024 – Current
AMLab (Amsterdam Machine Learning Lab), UvA   *Amsterdam, Netherlands*

- Under the supervision of Erik Bekkers (UvA) and co-supervision of Daniël Pelt (ULEI)
- Generative models and active learning for shapes and segmentation

Research Engineer   Mar. 2023 – Feb- 2024
RPL (Division of Robotics, Perception and Learning), KTH   *Stockholm, Spain*

- Under the supervision of Danica Kragic
- Equivariant representation learning in DL
- Metric learning in generative models
- Steiner tree problem in Hyperbolic geometry

Trainee Internship   Sep. 2020 – Jan. 2021
MEDAL laboratory, CTB (Center of Biomedical Technology)   *Madrid, Spain*

- Application of information recognition algorithms in clinical notes
- Development of new techniques for the recognition of metrics, doses and numbers
- Fine-tuning a BERT model in breast and lung cancer's clinical notes

EDUCATIONAL BACKGROUND

MSc in Machine Learning   Sep. 2021 – Oct. 2023
KTH Royal Institute of Technology   *Stockholm, Sweden*

- Average grade: 4.00 GPA
- Thesis in Topological regularization and relative latent representations

B.S. in Mathematics and Computing   Sep. 2017 – Jul. 2021
Universidad Politécnica de Madrid   *Madrid, Spain*

- Average grade: 9.78/10.0 (4.00 GPA)
- Best academic record of the ETSIINF (Higher Technical School of Computer Engineers) of the promotion 2020/2021
- Matriculation with Honors in 29 courses
- Three Scholarships for Academic Excellence granted by the Community of Madrid
- Thesis in Robustness of Persistent Homology: the Stability Theorem

Secondary Education and Baccalaureate   Sep. 2011 – Jul. 2017
Colegios Ramón y Cajal   *Madrid, Spain*

- University addition mark (EvAU): 13.03/14.0

COMPUTER AND PROGRAMMING KNOWLEDGE

Programming: Python, Java, C, R, SQL, MATLAB, Maple, Prolog, Bash

ML: Pytorch, Pytorch Lightning, Tensorflow, (a bit of) JAX

Computer: LaTeX, Git, Microsoft Office, Keynote, Pages (Apple), Adobe Photoshop, Adobe Lightroom

LANGUAGES

English: Advanced level (C1), CAE by **Cambridge English**

Spanish: Native language

German: Low Beginner Level

OTHER PERSONAL ASPECTS

Driving License: B
Own vehicle (in Spain)
I am passionate about learning new applications of geometric, topological, and algebraic methods to analyze or improve the methods of machine learning

Stockholm, February 6, 2024

Alejandro García Castellanos