

Guim Perarnau

Machine learning engineer at Bloomberg

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Experience

Machine learning engineer

Bloomberg

March 2018 – Present London, United Kingdom

- Created a large scale data pipeline that fetches, filters and enriches millions of news from different sources (including human annotations) to create a ranking dataset. Implemented strategies to reduce data bias. Python, Spark, Pandas.
- Created an end-to-end ML system that continually and automatically trains a new ranker, evaluates it against the production ranker, and exports it for deployment. Python.
- Built the infrastructure to deploy and monitor a ranker that sorts a live influx of news stories (200 per second) according to its relevance.
- Developed the back-end of a news clustering and summarization model. Designed its API for integration with internal services. C++.

Machine Learning Research engineer

Aframe

June 2017 – March 2018 London, United Kingdom

- Designed a face detection and recognition pipeline with faster than real time inference on live streamed video. The model was able to recognize new faces using only one image for training. Python.

Research engineer (internship)

Computer Vision Center

Sept 2014 – June 2015 Barcelona, Spain

- Developed a hand detector on a budget RGB camera. Accuracy of 97.44%. MATLAB, Python.
- Built a music symbol classifier to read music sheet pictures. MATLAB.

Education

Pre-PhD

Computer Vision Center

Sept 2016 – Dec 2016 Barcelona, Spain

Extended my master thesis, which was published and selected as an oral presentation in the NeurIPS Workshop on Adversarial Training.

M.Sc. in Computer Vision. Grade: 9.11/10

Autonomous University of Barcelona

Sept 2015 – Sept 2016 Barcelona, Spain

Graduated second in the class with 4 honors.

B.Sc. in Computer Science. Grade: 9.08/10

Autonomous University of Barcelona

Sept 2011 – June 2015 Barcelona, Spain

Graduated first in the class with 25 honors.

Publications

Conference Proceedings

- “NSTM: Real-Time Query-Driven News Overview Composition at Bloomberg” (2020). In: ACL.
- “Invertible Conditional GANs for image editing” (2016). In: *NeurIPS Workshop on Adversarial Training*.

Technical skills

Machine learning Deep learning
Computer vision Back-end engineering
Python C/C++ Git \LaTeX
Numpy SKLearn Torch Pandas

Honors & awards

- Best final master dissertation 2016**
Invertible Conditional GANs: change attributes of your face with GANs. Lua (+Torch). Grade: 10/10
<https://github.com/Guim3/IcGAN>
- Top 5 highest academic performance (M.Sc.) 2016**
2nd position among 29 students.
- Highest academic performance (B.Sc) 2015**
Graduated first of a class of 89 students.

Projects

Unreleased video game

Personal project

Nov 2017 – Present

Developing a video game and game engine from scratch as a hobby to fulfill both creative and engineering motivations. C++.

Languages

English: fluent ●●●●●
Spanish: native ●●●●●
Catalan: native ●●●●●