

GIULIO STARACE

giulio.starace@gmail.com ◇ November 20, 2021

EDUCATION

MSc Artificial Intelligence
University of Amsterdam

Amsterdam, The Netherlands
September 2021 - 2023 (ongoing)

BSc Hons. in Natural Sciences (Physics & Computer Science)
Durham University

Durham, UK
October 2016 - July 2019

- Natural Sciences degree allows candidates to take modules from selected departments
- BSc Project with *P&G*: exploring methods for simulating wear-induced dry abrasion in clothes.
- Achieved First-Class Honours

EXPERIENCE

ESO - European Southern Observatory
Research Engineer

Cerro Paranal, Chile
September 2020 - September 2021

- Worked on high-resolution forecasting of Astronomical Seeing using Machine Learning methods.
- Ran preliminary ARIMA-based approach before moving to LSTM neural networks.
- Developed Python PyPI library "nowcastlib", for more rigorous experimentation across colleagues.

Software Engineering Intern

August 2019 - January 2020

- Part of the newly formed Info & Knowledge Management Team, tasked with technical side.
- Designed, developed, tested and deployed a system for displaying information from the observatory's several ticket systems in a unified and personalized manner via Microsoft Graph API.

Video.io - startup
ML Engineer

Remote, Anywhere
February 2020 - June 2020

- Worked on implementing abstractive summarization of dialogic video. (Pandas, Google Cloud Speech API).
- Real time speech to text captioning of live video streams (NodeJS Streams, FFmpeg, HLS/DASH video)
- Revamping backend and devOps for internal experimental website (NodeJS, GraphQL, PostgreSQL, Docker, NGINX) with a little exposure to frontend (React)

JAXA - Japan Aerospace Exploration Agency
Research Intern

Sagamihara, Japan
August 2018 - October 2018

- Part of LIRA (Laboratory for InfraRed Astrophysics)
- Developed software to estimate visibility of satellite given simulated orbits and thermal constraints
- Performed data-analysis, particularly multi-parameter regression, on ro-vibrational dataset in an attempt to characterize starburst galaxy NGC 253

PERSONAL PROJECTS

GPTrue or False

November 2019

- Determine the likelihood that given body of text was generated by OpenAI's GPT-2 model in your browser.
- Featured on digitaltrends.com, lifehacker.com, techthelead.com and others; 100+ stars, 10+ forks on GitHub.
- Tweeted about by Tesla AI director Andrej Karpathy, and Javascript creator Brendan Eich.

MISCELLANEOUS QUALITIES

Languages

English (Fluent), Italian (Fluent), Spanish (Professional)

Programming Languages

Python, Javascript, SQL, C/C++, HTML/CSS

Frameworks and Specs

NodeJS (Express), GraphQL, React, Protocol Buffers

Libraries

NumPy, Pandas, matplotlib, TensorFlow, PyTorch, OpenCV, statsmodels, sklearn

Technologies

Vim, Git, VSCode, ssh, Latex, FFMPEG, Docker