

GIULIO STARACE

Vicolo della Renella 95, 00153, Roma, RM, Italy
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EDUCATION

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

Durham, UK

Durham University

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

Cerro Paranal, Chile

Research Engineer

September 2020 - Present

- Working on high-resolution forecasting of Astronomical Seeing using Machine Learning methods in close collaboration with Microsoft Research in Redmond
- Ran preliminary ARIMA-based experimentations; currently transitioning to Deep Learning LSTM approach.

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

Remote, Anywhere

ML Engineer

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

Sagamihara, Japan

Summer Intern

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, Hugo, Protocol Buffers

Libraries

NumPy, PyTorch, SciPy, matplotlib, OpenCV, Pandas, statsmodels, scikit-learn

Technologies

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

giuliostarace.com github.com/thesofakillers linkedin.com/in/giuliostarace