GIULIO STARACE

giulio.starace@gmail.com \diamond October 3, 2022

EDUCATION

MSc Artificial Intelligence

Amsterdam, The Netherlands

September 2021 - 2023 (ongoing)

University of Amsterdam

• Current GPA: 8.33.

• Electives: Advanced Topics in Computational Semantics, Reinforcement Learning, Neural Dynamics and Deep Learning

ABC Summer School - Computations in Consciousness and Perception $University\ of\ Amsterdam$

Amsterdam, The Netherlands

June 2022

- 2-week full-time programme with talks by experts from the fields of computational neuroscience, psychology and AI.
- Proposed a bio-plausible AuGMEnT model for long-term memory contra catastrophic forgetting. giuliostarace.com/ltm.

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.
- Achieved First-Class Honours.

EXPERIENCE

University of Amsterdam - AIRLab

Amsterdam, The Netherlands

Part-time Researcher (Research Assistant)

April 2022 - ongoing

• Working on efficient cross-lingual adaptation of multi-task monolingual prompt-enabled language models.

ESO - European Southern Observatory

Cerro Paranal, Chile

Research Engineer

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.
- Led and focused effort on the development of a unified data processing and evaluation pipeline.

Software Engineering Intern

August 2019 - January 2020

• 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).
- Revamped full-stack of internal experimental website (NodeJS, GraphQL, PostgreSQL, Docker, NGINX, React).

JAXA - Japan Aerospace Exploration Agency

Sagamihara, Japan

Research Intern

August 2018 - October 2018

- Developed software to estimate visibility of satellite given simulated orbits and thermal constraints.
- Performed multi-parameter regression on ro-vibrational dataset so to characterize starburst galaxy NGC253.

PUBLICATIONS AND PERSONAL PROJECTS

- van der Togt et al., [Re] Badder Seeds: Reproducing the Evaluation of Lexical Methods for Bias Measurement, 2022. ReScience C 8, #40. 10.5281/zenodo.6574704.
- GPTrue or False Browser extension showing the likelihood that given body of text was generated by OpenAI's GPT-2.
- iclingo Jupyter Kernel for answer set programming with clingo.
- bLANS Tool for converting sane-LaTeX to ANS-flavoured LaTeX and viceversa.

MISCELLANEOUS QUALITIES

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

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

Libraries NumPy, PyTorch, Pandas, Hugginface, matplotlib, OpenCV, statsmodels, sklearn

Frameworks and Specs NodeJS (Express), GraphQL, React, Protocol Buffers Technologies Vim, Git, tmux, VSCode, ssh, LATEX, FFMPEG, Docker

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