# Giulio Starace

May 31, 2025 | giulio.starace@gmail.com | github.com/thesofakillers | giuliostarace.com

#### EXPERIENCE

OpenAI Remote, Anywhere

Research Engineer

Oct 2023 - Present (Ongoing)

• Contractor role, working with Preparedness on evaluating model capabilities.

- Shipped PaperBench openai.com/index/paperbench/
- Shipped MLE-bench openai.com/index/mle-bench/
- Shipped SWE-bench Verified openai.com/index/introducing-swe-bench-verified/
- Other evals shipped at github.com/openai/evals feat. Policy Research

#### University of Amsterdam - AIRLab

Amsterdam, The Netherlands

Part-time Researcher (Research Assistant)

Apr 2022 - Oct 2022

• Cross-lingual adaptation of large language models (LLMs). Paper and Code: github.com/thesofakillers/claficle

## ESO - European Southern Observatory

Cerro Paranal, Chile Sep 2020 – Sep 2021

Research Engineer

• Worked on forecasting of Astronomical Seeing using ML methods.

• Developed of a unified data processing and evaluation pipeline: pypi.org/project/nowcastlib

Software Engineering Intern

Machine Learning Engineer

Aug 2019 - Jan 2020

• Unified and personalised the observatory's numerous ticket systems via Microsoft Graph API.

#### Video.io - startup

Remote, Anywhere Feb 2020 - June 2020

Worked on implementing abstractive summarization of dialogic video.

- Real time speech to text captioning of live video streams
- Revamped full-stack of internal experimental website
- TANA T

#### JAXA - Japan Aerospace Exploration Agency

Sagamihara, Japan

Summer Research Intern

Aug 2018 - Oct 2018

- $\bullet$  Developed software to estimate visibility of satellite given orbit simulation and thermal constraints.
- Performed multi-parameter regression on ro-vibrational dataset so to characterize starburst galaxy NGC253.

#### EDUCATION

#### MSc Artificial Intelligence

GPA: 8.2 (Cum Laude) | Amsterdam, The Netherlands

University of Amsterdam

Sep. 2021 – October 2023

- Thesis: Addressing Goal Misgeneralization with Natural Language Interfaces. link: github.com/thesofakillers/nlgoals
   Topics of note: Machine Learning, Deep Learning, Natural Language Processing, Information Retrieval
- Topics of note: Machine Learning, Deep Learning, Natural Language Processing, Information Retrieval, Reinforcement Learning, Spiking Neural Networks

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

Amsterdam, The Netherlands

June 2022

• 2-week full-time computational neuroscience programme. Developed Project proposal available at giuliostarace.com/ltm.

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

GPA: First Class Honours | Durham, UK

Durham University

Oct. 2016 – July 2019

Topics of note: Statistics, Vector Calculus, Linear Algebra, Thermodynamics, Quantum & Particle Physics, Databases,
Algorithms and Data-structures, Cryptography and Information, Compiler Design, Operating Systems, Computer Vision

## OTHER PROJECTS & PUBLICATIONS

- Starace et al., *Probing LLMs for Joint Encoding of Linguistic Categories*. Findings of EMNLP 2023. arXiv:2310.18696.
- 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.
- **GPTrueOrFalse** (100 + stars on GitHub) Browser extension showing likelihood that given body of text was generated by OpenAI's GPT-2.
- iclingo Jupyter Kernel for answer set programming with clingo.
- gigachadify Put any face onto the Gigachad meme using ML.

### MISCELLANEOUS QUALITIES AND SKILLS

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

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

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

Frameworks and Specs PyTorch Lightning, WandB, NodeJS (Express), GraphQL, React Vim, Git, tmux, VSCode, ssh, LATEX, FFMPEG, Docker, SLURM