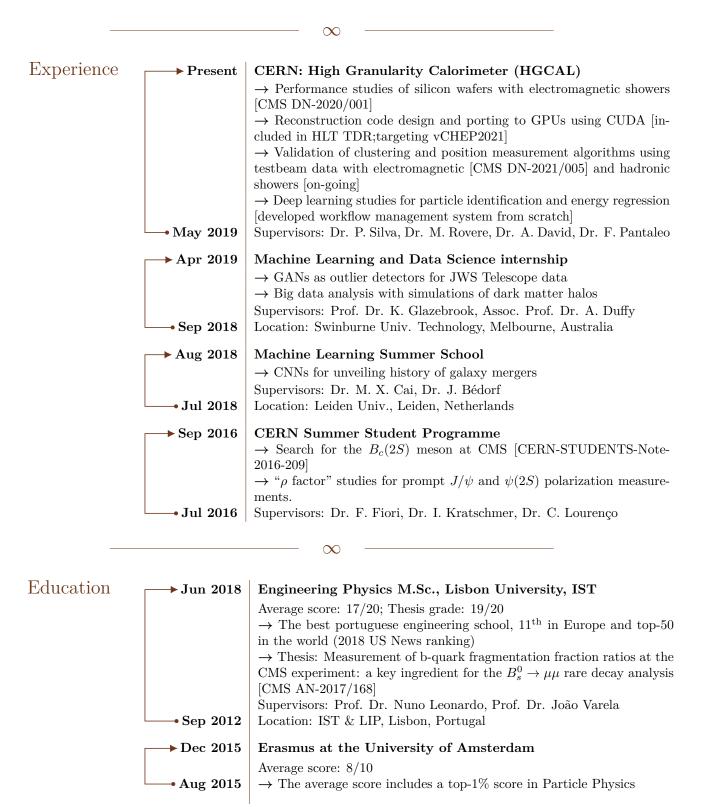
Curriculum Vitæ

Personal details

Name: Bruno Alves

GitHub: https://github.com/b-fontana

E-mail: bruno.alves@cern.ch



Grants & Awards

2018 Machine Learning internship grant (Melbourne, 7 months)

 \rightarrow Funded by Dr. Glazebrook's competitive ARC Laureate Fellowship

Machine Learning summer school grant (Leiden, 2 months)

→ Very competitive (around 60 candidates per project)

2017 M.Sc. grant (Lisbon, 6 months)

 \rightarrow Awarded by LIP

Technical internship grant (Vienna, 6 weeks)

 \rightarrow Ion detector assembly

2016 | Winner: LIP Técnico Particle Challenge

→ Answering several written questions over the period of one week

 \rightarrow Presentation for a panel of experts on Particle Physics

Prize: 6 months grant

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Schools & Posters

2020 | Posters@LHCC (CERN)

 \rightarrow HGCAL: Evaluation of the impact of different partial silicon wafer geometries in the response to electromagnetic showers

2019 Efficient Scientific Computing School (Bertinoro, Italy)

→ Examination passed successfully

 \rightarrow Poster presentation

OpenLab courses (CERN)

 \rightarrow Programming and environments for parallelism

→ Computer architecture and efficient programming

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Skills

Languages

Portuguese/Italian (native), English (fluent), German (intermediate)

Computing

Programming languages

 \rightarrow Proficient: Python, C, C++, Shell

 \rightarrow Curious about Julia, Go, SQL

Others

→ General: numpy, scipy, pandas, ...

→ Visualization: bokeh (+ custom wrapper), matplotlib, seaborn

→ Machine learning: tensorflow, keras, scikit-learn

 \rightarrow GPU computing: CUDA

 \rightarrow Code versioning: git

→ Code workflow management: luigi

→ CERN specific: CMS-SW, ROOT, uproot, SWAN

 \rightarrow Job submission: HTCondor, slurm

Communication

Excellent communication skills developed thanks to frequent meetings at CERN, talks given in multiple countries, poster presentations and presentations for schools.

Others

CERN Summer student 2020 co-supervisor:

 \rightarrow Search for rare $W \rightarrow \pi \gamma$ and $W \rightarrow \pi \pi \pi$ in top events

Tutor experience as a Red Cross volunteer:

 \rightarrow Help problematic children to better understand and enjoy Mathematics, including foreign children which did not speak Portuguese

Geneva, on the $3^{\rm rd}$ of February 2021

(Bruno Alves)