Shaun Rafael Cassini

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Education

Bachelor's & Master's in AI and Computer Science Sep.2018 - Jul.2022

University of Sheffield

- · Currently on a first class/distinction with honors
- · First class mark on my dissertation project on applied biometric computer vision for gait recognition
- · High academic achievement: e.g. 87 in Logic, 85 in Speech Processing and 90 in Machine Learning

A-Levels/GCSEs Sep.2015 - Jul.2018

Sedbergh School

- · A-levels in Maths, English Literature and French with grades AAA
- · 11 GCSEs with 5 A*s and 6 As, Grade 8 LAMBDA (Speech & Drama) award, Debating team captain

Experience

Research project in chaotic time series prediction Sep.2021 - Jun.2022

Master's Thesis

- · Co-authored a mathematical research paper led by Dr. Joab Winkler
- · Explored the use of regularisation in echo-state networks with matrix decomposition methods

Undergraduate teaching assistant Sep.2021 - Jun.2022

University of Sheffield

- · Delivered labs in introductory Java, Computational theory & Complexity, and Logic

Voiced activity detection (VAD) systems Mar.2022 - Jun.2022

Personal Project

- · Implemented VAD algorithms using software engineering and machine learning practices
- · Built FF, LSTM and 1D-CNN models using PyTorch
- · Explored different metrics for evaluation including F1-measure, EER-rate, DET & ROC-curve etc.

Genetic/evolutionary algorithms Dec.2021 - Feb.2022

Personal Project (Blog Post)

- · Tested on 'magic hexagon' problem, implemented with Python & Numpy
- · Used statistical methods, i.e. Monte Carlo sampling, for the runtime analysis of EAs

Developed a productivity app in Angular Jun.2020 - Aug.2020

Freelance

- · Pitched and received independent funding from the university
- · Gained hands-on experience with the mobile software development process

Helped create a Python course and presented in London Feb.2019 - Jun.2019

Enactus Sheffield

- · Assisted with the development of Code Creators Sheffield - a Python course for beginner programmers
- · Presented at ExCel London in front of 5,000 people

Key Skills

- - Python, PyTorch, GPU CUDA programming in C, Java, Javascript, No SQL and SQL databases, Angular
- - Solid mathematical and problem-solving aptitude (Linear Algebra, Probability Theory, Calculus)
- - Fluent/native in English and French with strong communication, team-working and literary skills
- - Creative mindset (Creative writing, film and music production - AAA grade from Berklee College of Music)