

# Shaun Rafael Cassini

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## Education

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### Bachelor's & Master's in AI and Computer Science

Sep.2018 - Jul.2022

*University of Sheffield*

- On track for a first class/distinction with honors
- First class mark on my dissertation project on applied computer vision for gait analysis
- Consistently achieved high marks, including 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

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### Researching Chaotic Time Series Prediction with Echo-State Networks

Sep.2021 - Present

*Master's Thesis*

- Co-authoring a mathematical research project led by Dr. Joab Winkler
- Assessing the stability of echo-state networks with matrix decomposition methods

### Undergraduate Teaching Assistant

Sep.2021 - Present

*University of Sheffield*

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

### Built a Paralellised Evolutionary Algorithm to solve an NP-Hard Puzzle

Dec.2021 - Feb.2022

*Personal Project*

- Used Python & Numpy for highly efficient and vectorized programming
- Interested in statistical methods, i.e. Monte Carlo sampling, for the runtime analysis of EAs
- Discussed implementation, experiments and conclusions in a [blog post](#) on my website

### Developed a Prototype Mobile App

Jun.2020 - Aug.2020

*Freelance*

- Pitched and received funding to develop a mobile productivity app written in Angular/Ionic
- 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

### Robotics Engineering Internship

Jun.2018 - Aug.2018

*Labman Automation*

- Designed, manufactured and assembled a prototype autonomous rover

## Key Skills

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- 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 (film and music production, AAA grade certificate from Berklee College of Music)