

MATTHEW LE MAITRE

GRADUATE COMPUTER SCIENTIST

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EDUCATION

M.Eng. in Computer Science

Cambridge University

Oct. 2018 – June 2019

- Distinction, ranked 1st in cohort.
- Awarded Sir Robert Cox Prize in CS and Entrepreneur First Prize for best student.
- Thesis title: Evaluating the Implications of Controller Co-Existence in Autonomous Vehicle Traffic.
- Modules: ML; Probabilistic ML; Computer Vision; NLP; Mobile Robotic Systems.

B.A. in Natural Sciences (Physics)

Cambridge University

Oct. 2015 – June 2018

- Class I
- Awarded College Prize

A-Levels/GCSEs

Elizabeth College

2011 – 2015

Guernsey

- 4 A-Levels at A* (2×Maths, Phys., Chem.)
- 11 GCSEs at A*

OTHER PROJECTS

University projects include:

- An investigation to characterise a Phase Locked Loop microchip (2018);
- A Galactic Tidal Tails simulator (2017);
- Research on the Hysteresis of Steel, Fe & CuNi (2016).

Personal projects include:

- [A 3D WebGL Pythagorean Tree generalisation](#) (2015);
- [A Tic Tac Toe game in an arbitrary spatial dimension, with gravity](#) (2014);
- An Autonomous GPS Boat (2013);
- A Quadcopter Controller OSX App (2012).

EXPERIENCE - ACADEMIA

Simulating Controller Co-Existence in Autonomous Vehicles

Digital Technology Group

Python JS WebGL Java pandas

Oct. 2018 – Sep. 2019

Cambridge

- Simulated autonomous vehicle traffic to investigate throughput, safety and comfort as controller heterogeneity is increased.
- Originally my final year dissertation, I was invited to carry out further paid research and publish it in an academic paper.

Context Aware Drones

Computer Vision Group

Python Unreal Engine Tensorflow

Feb. 2019 – Apr. 2019

Cambridge

- Worked with research group to development context-aware drones.
- Wrote an open-source library to generate perfect bounding boxes around objects of interest from output of the AirSim drone simulator.
- Designed and built a parametrisable noise emulator, to provide realistic levels of noise to bounding boxes.

Using Gaussian Processes to Model Flood Propagation

Cambridge Computer Laboratory

Python scikit-learn pandas

Oct. 2018 – Feb. 2019

Cambridge

- Joint Gaussian Processes were trained on river depth data, using a custom kernel incorporating a delay term, to investigate propagation.

PUBLICATIONS

- Le Maître, Matthew and Amanda Prorok (2020). "Effects of Controller Heterogeneity on Autonomous Vehicle Traffic". In: The 23rd IEEE International Conference on Intelligent Transportation Systems. arXiv: [2005.04995](#).
- John Young, Matthew Le Maître et al. (2018). "Aperture synthesis imaging of colored GEO objects". In: *Optical and Infrared Interferometry and Imaging VI*. vol. 10701. International Society for Optics and Photonics. SPIE, pp. 728–735. DOI: [10.1117/12.2313231](#).

PROGRAMMING

OCaml	●●●●●
Python	●●●●●
JavaScript	●●●●●
PHP	●●●●●
SQL	●●●●●
BASH	●●●●●
C/C++	●●●●●
Java	●●●●●

TOOLS

Bootstrap	Angular	JQuery	Git
TensorFlow	numpy/scipy	pandas	
AWS	LaTeX	Google Sheets/MS Excel	

STRENGTHS

Communication	Agile methodologies	
Problem Solving	Public Speaking	
Logistics	Data Analysis	Fast Learner

REFEREES

Dr. Amanda Prorok
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Computer Laboratory
William Gates Building
15 JJ Thomson Avenue
Cambridge, CB3 0FD

EXPERIENCE - INDUSTRY

Co-Founder

Seeing Systems

📅 Jan. 2025 - Present

Hardware Python

📍 London / San Francisco

- Founded a sUAS (small unmanned autonomous systems) Defence company with my brother.
- Funded by Y Combinator (W26).
- Building this company.

Software Engineer

Jane Street Capital

📅 May. 2021 - Jan. 2026

OCaml

📍 London / Hong Kong

- Worked on risk management systems handling billions of dollars.
- Implemented SFTP infrastructure bottom up, from the RFC, and built a proprietary client that was state-of-the-art.

Analyst

Farsight Consulting

📅 Jan. 2020 - Feb. 2021

JS Angular SQL Python HTML/CSS AWS

📍 London

- Worked in the UK Department for Education to adapt the "Get Teaching Experience" online service for the UK Teaching system during the COVID-19 pandemic.
- Helped to re-structure a software development company in Dublin.
- Worked alongside developers in an agile team to design and build a social housing platform for over 10,000 tenant users.
- Worked directly with the CEO to design and develop a new digital product, from conceptualising, to market research, mock-ups and building the initial product using Angular.
- Working towards Professional Scrum Master I (PSM I) certification.

Temporary Stockbroking Researcher

Cannacord Genuity Wealth Management

📅 June 2015 - Jan. 2016, Various

Communication Analysis

📍 Guernsey

- Started as a client on-boarding assistant.
- Was subsequently moved to broking department to carry out research on companies for potential large scale investment or disinvestment.

Freelance Website Developer

Self-employed


📅 2014 - 2017


JS PHP SQL HTML/CSS WebGL JQuery


📍 Guernsey


- Designed and developed websites for several organisations, and later acted as webmaster for numerous university societies.


OTHER INTERESTS


 **Fencing**
In 2015 I represented Guernsey in the Fencing Commonwealth Games in Cape Town.


 **Shooting**
In 2015 I represented the Channel Islands in the Cadet International Shooting Match; we beat England to win the international event.

 **Marine Pilotage**
RYA Yachtmaster Offshore Theory and RYA Powerboat II qualified. Can work on commercial craft up to 24m long.


 **Running**
Started running in 2017.

 **Squash**
For when it's too rainy to run.

 **Japanese**
Have been (slowly) self-teaching Japanese for three years.

 **Exploring**
Fan of travelling, hiking, or generally being outdoors.

 **Music**
Can play the saxophone, poorly.

 **Aircraft Pilotage**
Have had 3 flying lessons. Can take off, but not land.

EXPERIENCE – CHARITABLE

Co-President of Charitable Organisation

Cambridge Hands-on Science (CHaOS)

Leadership

Public Speaking

 Oct. 2017 - Oct. 2018

 Cambridge

- Co-President of the largest student-run science society in Cambridge.
 - With over 2,000 members, we engage over 10,000 members of the public face-to-face in hands-on science outreach annually.
 - Oversaw organisation of an 8-week science outreach tour to areas with lower than average rates of progression to higher education.
 - Gave a public science outreach lecture on cryptography, and oversaw organisation of public talks, robotics workshops and over 100 hands-on science experiments during UK Science Week.
 - Coordinated over 10 other science outreach events with the Institute of Physics, Cambridge University and other organisations.
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Committee Member of Charitable Organisation

Cambridge Hands-on Science (CHaOS)

Logistics

Analysis

 Oct. 2016 – present (involved since 2015)

 Cambridge

- Evaluations Officer 2018 – 2019: duties included quantifying the society's impact and assisting with fundraising.
 - Webmaster 2016 – 2017: began development of new website.
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Student Helpline Volunteer

Nightline Association

Empathy

Emotional Intelligence

 Oct. 2018 – Jan 2020

 Cambridge

- Trained as a volunteer for a student helpline.
 - Volunteered to spend nights manning helplines, offering support, advice and an ear to those who needed it.
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