# **Luna Lamb**

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As a dedicated computer science student and private tutor, I bring a proven track record of success to the table. My recent accomplishments include winning the 2023 Social Statistics Hackathon, achieving an impressive 92% second year grade average, setting a record for the fastest intern code going live at the Information Services Group at the University of Edinburgh. Along with contributions to open source Arm optimized routines, GlibC and KleidiCV as well closed source work on Arm performance libraries.

With a stellar academic background (A\*AA at A level) and a history of tutoring numerous A-level students to exceed expectations, my ability to consistently outperform expectations is well established. I have a deep passion for learning and thrive on adapting to challenges. My diverse range of experiences, both in the academic and personal realms, sets me apart from other candidates.

#### **EDUCATION**

### **Manchester Metropolitan University**

**BSc, Computer Science** Grade Average at present 92%

Sept 2020-June 2025

Year 2

Algorithms and data structures, Networks, Industry and community engagement, Ethical Hacking, Operating systems, Software development.

Years 1 and 2 at the University of Edinburgh

Modules in object-oriented programming (Java), Functional programming (Haskell), Mathematics, Data Science (Pandas/Seaborn/Python), Machine Learning (PDDL), Algorithms and data structures (Python), Computer Systems(85%) (C, MIPS) and Software Engineering (Java)

Outside modules: Introduction to Gender in the Contemporary World, Queer Studies (82%)

Varndean College Sept 2017 – May 2019

**A-Levels:** AAA\* in Maths, Computer Science, and Photography.

Dorothy Stringer School Sept 2013 – June 2017

GCSEs: 9 GCSEs (Equiv. 2A\*, 3A, 4B) including A\* in Maths, A in Computer Science, B in English.

Free Standing Maths Qualifications: A in Further Maths, B in Advanced Additional Maths.

#### WORK EXPERIENCE

ARM July 2024 – Present

### Software engineering Intern

- Open source contributions to a range of mathematical libraries.
- Work in Linear algebra, computer vision, optimized math's routines, polynomial approximation and generation.
- Work on devops and testing suites.
- ARM assembly, neon and SVE intrinsics, C, C+, Groovy, bash, make file and python.
- Trained in intellectual property, copyright and open-source regulations and law.

# Information Services University of Edinburgh

May 2021 - Sept 2021

# Web Development Intern

- Worked independently to implement the backend PHP/jQuery project.
- Worked with a large team in an agile methodology.
- Assisted in time-sensitive implementation of the testED website project.
- Independently completed LinkedIn learning modules to assist in training.

Private tutor June 2018 – present

- Delivered over 400 hours in Mathematics and Computer Science tuition, with all lessons rated five stars by students.
- Managed the stress and anxiety of parents and students leading up to exams.

Adapted teaching styles to meet the needs of students from primary to A-Level.

## Varndean College

### **Learning Coach for Mathematics**

Sept 2019 - May 2020

- Supported Students on a 1:1 basis, managing queries and concerns relating to exam material and exams.
- Collaborated with all staff members within the mathematics department to effectively aid them.
- Understood and applied professional practices and safeguarding in a sixth-form college environment.

#### **PROJECTS and Skills**

**Programming languages:** C, C++, Groovy, Bash, Make File **(ARM)** Haskell, Python, PDDL, MIPS and C (university); PHP, Java and jQuery(Internship.

**Tools:** Drupal, Juypter, Microsoft Office suite, Git,, WordPress, LaTeX.

**Interests and Areas of Study:** Mathematics, Optimization, Data Science, Software Engineering, Human-Computer Interaction and Ethical Practices.

### **Open source contributions**

Sole author of multiple optimised routines for ARM advsimd Archituctures, currently fastest implementation of these globally, shipped with GlibC, the standard C library for most linux distributions. See them <a href="here">here</a>.

Contributions to KleidiCV open source computer vision library in C++, see <a href="here">here</a>.

### Social Statistics Hackathon 1st place

### **Sept 2023**

I participated in the Social Statistics Hackathon hosted by the Department for Social Statistics at the University Of Manchester. I used my technical data analysis skills and ability to work to a tight deadline to create a presentation. When I presented the project, this and my communication skills won me first prize. I used Python in Jupyter Labs to develop visualisations and model data. I also used my critical thinking skills and knowledge of sociological factors to discuss the relevance of these findings and compare them to current literature.

#### **Website Manager**

I am the sole website manager for a large charity. In charge of checking if content is up to date and adding new content on their WordPress-based site.

#### Impact of GPT

I am passionate about education, and I am currently working on a project to explore the impact of GPT on the environment, thinking about how we can use data science to educate and empower. This Ongoing project allows me to keep being involved with data analytics. You can see it here: https://lambxx.github.io/ImpactOfGPT.

# **Ecotech Explorers: Greener Computing Project**

I will work in a team throughout October and November, investigating the impact of computing on society and presenting a project at the end.

### **Linked-In Learning Courses**

recently completed a course in the R programming language. I am finishing a study on Git and working through courses to prepare for my CCST networking certification. You can check my LinkedIn to see an up-to-date list of courses I have completed.

#### **Ticket system**

I worked in a team of 4 to create a Java-based application with complete documentation following an agile methodology. We also developed class diagrams and Unit tests. I was using git throughout.

### **Data Science Paper**

Created a complete data science report following the structure of an academic paper. Using Pandas/Seaborn in Jupyter for the statistical analysis and visualisation.

### **Modelling CPU**

I used the C programming language to model the CPU, achieving a near 100% mark, aiding my overall 85% grade in computer systems.