LIAM L. H. LAU

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📍 Cambridge ◇ UK

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EDUCATION

University of Cambridge, Gonville and Caius College   *2017 - 2020*
B.A. Natural Sciences (Physics) with an Optional 4th Year
First-Class in Maths and Physics. 2.i in Chemistry and Materials. (First Year)
First-class in Physics A, 2.i in Physics B and Maths (Second Year)

Westcliff High School for Boys   *2010 - 2017*
4A*in A level Physics, Maths, Further Maths & Chemistry *(2017)*
12A*, 1 A in GCSE's. A*'s including: English, Maths, Chinese & Physics *(2015)*
A in Free-Standing Mathematics Qualification (Additional Maths OCR) *(2015)*

Awards
Silver Medal at the British Physics Olympiad *(2016)*
Gold Award for the Cambridge Chemistry Challenge *(2016)*
University of Cambridge Senior Physics Challenge *(2016)*
10th Nationally in the FMSP Year 10 Team Maths Challenge *(2014)*

EXPERIENCE

Research Internship on Cosmological Data and Astrostatistics   July 2019- Present
Summer Research Intern   📍*Kavli Institute for Cosmology, Cambridge*

Airbus Fly Your Ideas International Competition   Oct 2018- June 2019
Project   📍*Toulouse, France*

· International finalist for Airbus Fly Your Ideas with Team Seren. Our idea involves the development of a novel way of generating power in radiation bands around planetary bodies.
· Worked on the modelling and simulation of the specific power of the system.
· Presented in front of a live audience of Airbus employees and judges.

Summer Project in the SMF Group   July - August 2018
Summer Intern   📍*Cavendish Laboratories*

· Coded a short simulation to solve a partial differential equation with a finite difference method.
· Simulated electron trajectories in the ioniser of the Scanning Helium Atom Microscope (SHeM) using COMSOL.
· Tested peltier modules in vacuum and coded the sample cooling and sample heating programs in MATLAB.

Summer Project in the Photonics Academy of Wales   July - Aug 2016
Summer Student   📍*Bangor, Wales*

· Designed and made an automated system which copies the motion of a control trolley using digital electronics and lasers.

PROGRAMMING SKILLS

Git, Python, LaTeX, Bash, Linux/Unix	2 Years
Matlab,C/C++	1 Year
MySQL, HTML, CSS, PHP	6 Months

LANGUAGES

English	Native Speaker
Cantonese	Limited Working Proficiency
Mandarin	Basic

EXTRA-CURRICULAR

Captain of the Gonville and Caius Basketball Team ⊛ 2017 - 2019

· Organise and run weekly practices for the team to compete in the Cambridge College league. We went undefeated in the College League in 2018-19.

Co-Chair of the Cambridge University Physics Society ⌕ 2019 - Present

· Organising academic talks and an upcoming joint event with the Oxford Physics society.

Personal Projects 📌

· Personal resúmé website.
· Simulation of orbits using numerical methods.

Hackathons 2018 - Present

· **AI Hack** – 3rd Place GWAS Project on using logistic regression with single-nucleotide polymorphism data to determine significant SNPs associated with coronary artery disease. A link to our paper on our methodology can be found on my website.
· **Oxford Hack** – Started a project on a dynamic, smart student calendar.

Duke of Edinburgh Award: Bronze, Silver ⏱

· Volunteering experience including interacting with disabled individuals at Essex's Disability Inclusion Society.
· This involved collaborative projects to revamp public spaces, such as planting a visual garden for Basildon Hospital.

Piano ♫ 2008 - Present

· Continuation to Grade 7. Especially enjoy playing pieces from the Romantic period.

REFERENCES

References are available on request.