

# Albert Stark

albert3@mailfence.com

albert10032.github.io

Darlington, Sydney, Australia

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## Education

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### University of Sydney

Bachelor of Science

Major: Mathematics, Minor: International Relations

February 2024 to Present, Camperdown/Darlington, Sydney, Australia

Distinction WAM

### The Oratory School

GCSE & A Levels

2016 to 2023, Woodcote, Nr Reading, UK

AAB at A Levels, 9-7 at GCSE

## Projects

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### Better primitive roots modulo $p$

Supervised by: John Voight, Sem 1 2026

An investigation in optimising the algorithms in Magma for finding primitive roots.

### Neuronal dynamics and the Connor-Stevens model

[github.com/USYD-MATH3888-2025-Group-9/model-implementation](https://github.com/USYD-MATH3888-2025-Group-9/model-implementation)

The concluding project for the Mathematics part of my B.Sc, working as a group I and 3 other students were able to demonstrate some interesting behaviour in the Connor-Stevens model for neurons, and characterise the physicality of this behaviour

### Factorisation

[github.com/Albert10032/factorisation](https://github.com/Albert10032/factorisation)

An attempt to implement a general factorisation algorithm

## Volunteering

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### Sydney University Mathematics Society (SUMS)

Dec 2025 to Present, USU/USYD

I am a member of the Operations subcommittee, where I help to organise academic events, including the weekly seminar where PhD students, faculty members and guests give talks aimed at first year undergraduate students

### USYD Puzzle Society

April 2024 to Present, USU/USYD

I have been involved in running Puzzlesoc since I was in first year, when I joined as a subcommittee member for writing in April 2024. I went on to become editor-in-chief at the start of 2025 and the secretary in April of 2025. I stepped down from editor-in-chief at the end of 2025 and continue in the role of secretary, though I do contribute to puzzles occasionally.

### Sydney University Judo Club (SUJC)

August 2025 to Present, SUSF/USYD

I am a subcommittee member for Judo, and have represented the University at national level events.

## Certifications

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### First aid

**HLTAID009:** Provide CPR, **HLTAID010:** Provide basic emergency life support,

**HLTAID011:** Provide First Aid

## Skills

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### Computer skills

C/C++, Python, Bash, Magma, SageMath, L<sup>A</sup>T<sub>E</sub>X, Linux, Jupyter notebooks, HTML/CSS

### Languages

Japanese ( $\approx$ N3), Latin (GCSE), Elementary Persian and Chinese

## References

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Available upon request