Lachlan Jones

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About Me

I am an eager, hard-working and results-orientated recent graduate with a Master's degree in artificial intelligence. My background is in mathematics and computer science, and I am passionate about combining this knowledge with machine learning approaches to solve complex problems. I am keen to apply my strong teamwork, communication and problem-solving skills in a challenging and rewarding role.

Education

University of Canterbury – Master of Artificial Intelligence   Feb 2024 – July 2025
- Focus on deep learning and classical statistical machine learning
- Mathematics electives in advanced abstract algebra (Galois theory) and projective geometry
- Thesis on classifying lifetime smoking exposure with DNA methylation trained machine learning
- GPA: 8.25/9.0

University of Canterbury – Bachelor of Science in Mathematics and Computer Science   Feb 2020 – Nov 2022
- Mathematics with a focus on pure mathematics, including analysis, abstract algebra and cryptography
- Computer Science with focus on algorithms, networking and computability
- GPA: 7.52/9.0

Experience

Junior Software Developer – Digital Transformations Ltd.   Nov 2022 – Feb 2024
(Full-time)
- Contracted full-stack web developer part of a small team
- 14 months professional experience working with clients

Mathematics Tutor – Mathematics and Statistics Department, University of Canterbury   Feb 2024 – Present
Feb 2022 – Nov 2022
(Part-time)
- Distance and local tutor for AIMS - Advancing in Mathematical Sciences paper
- Involved in the mid-year workshop each year, with 100+ students from around NZ

Residential Assistant – Arcady Hall (formerly Bishop Julius Hall of Residence)   Jan 2021 – Nov 2021
(Part-time)
- Lived on site in support of first year university students
- Included helping run events, organising tutoring and providing pastoral care

Professional Skills

Independence
- Professional experience completing assigned work independently, including researching and evaluating solutions to problems in a project
- Self-directed and designed a large machine learning project as part of my Master's thesis

Teamwork
- Professional experience working collaboratively to build large-scale projects
- Experience running events and camps as a tutor and an RA
- Proactive in seeking support when required, both professionally and academically

Punctuality
- As a software developer, I produced deliverables for clients against deadlines on large-scale projects
- As tutor, I have marked large volumes of test and exam questions to meet results deadlines

Communication

- Ability to explain concepts and communicate ideas from tutoring
- Experience communicating with clients on their requirements and the solutions available

Problem-Solving

- Background in pure mathematics with skills in constructing proofs
- Extensive experience in programming, with applications to computer science and data science

Technical Skills

Programming Languages: Python, JavaScript/TypeScript, HTML & CSS, LaTeX

Frameworks: React, Next.js, DrizzleORM, TypeORM, TailwindCSS

Libraries: Numpy, TensorFlow, Keras, scikit-learn

Technologies: Docker, PostgreSQL, Git

Mathematics Background: Calculus, linear algebra, abstract algebra (group, ring, field and Galois theory), cryptography, graph theory, number theory