

Alexander Melocco

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[Project Portfolio URL](#) | [LinkedIn URL](#) | [GitHub URL](#)

SUMMARY

Pursuing a Bachelor of Computer Science (AI) and Law at UNSW. I have worked as a backend software engineer for the startup Tutor Match, where I developed a hybrid content-based filtering search algorithm, enabling highly personalized matches between parents and tutors. Additionally, I served as a hybrid software engineering/legal intern and AI consultant, contributing to the software development and testing of SafeSpace@Elevate, a legal-compliance platform targeting workplace sexual harassment. Further, I engaged in AI research and data acquisition to support ESG risk management models. I also am deeply committed to social impact, volunteering and participating in Enactus, where I competed in Melbourne's 2023 and 2024 National Social Impact competitions.

WORK EXPERIENCE

Elevate Consulting Partners

Sydney, AUS

Hybrid Software Engineering/Legal Internship

June 2024 – Present

- Worked in SafeSpace@Elevate, a legal/regulatory compliance platform to target workplace harassment and enhance safety with a specialization in larger workplaces, backed by legal/psychiatric industry experts.
- Developed an AI-based system to summarize user sentiment, allowing comprehensive reports to inform clients of workplace issues, general sentiments, which included timelines and trends related to a range of metrics
- Utilized legal knowledge to ensure regulatory compliance across developed features, integrating legal requirements seamlessly into the software-development process
- Conducted extensive software testing, including unit testing and extended workflows, ensuring quality and reliable code

FairSupply Pty Limited

Sydney, AUS

Software Engineering Internship

July 2024 - Present

- Worked in research and data acquisition to power AI models trained to assist in ESG risk management with a particular focus on the issue of modern slavery
- Cultivated, researched and organized data for training, validation and testing of AI models
- Assisted in developing algorithms for automated risk assessment and reporting

TutorMatch AU

Sydney, AUS

Backend Software Engineer

Oct 2023 – Mar 2024

- Technical Co-founder of TutorMatch
- Developed and deployed an AI-based hybrid content-based filtering search algorithm to personalize student-tutor matches, leading to 65% increases in user satisfaction feedback over 3 months
- Developed backend architecture to support the platform's functionalities including future scalability concerns
- Implemented RESTful APIs to reduce backend computational load, measurably increasing site speed by ~30%
- Managed cloud infrastructure to ensure reliable and efficient service delivery (utilized AWS services)
- Non-technically, engaged in client management, conducted market research and business management

Talent 100

Sydney, AUS

Academic Teacher and Mentor

May 2022 - Present

- Experience in teaching classes of varying sizes, generally ranging from 6-12 students

- Fostered positive and supportive relationships with students by providing tailored tutoring sessions to recognize unique strengths, challenges and learning styles
- Consulted parents individually on specific methods of improvement to ensure maximal benefit from any session

Enactus UNSW

Sydney, AUS

Vice President of Externals

Dec 2022 – July 2024

- Assisted and competed in both the 2023, 2024 Enactus National Social Impact Competitions
- Involved in both the development and presentation of the social impact projects which aimed to address specific goals from UN's Sustainability Goals list
- Experience in management and organization of key events aimed at increasing publicity and revenue

Lime Seven

Sydney, AUS

Sales Consultant

Apr 2022 – Aug 2022

- Developed and implemented effective sales strategies to meet and exceed company targets
- Conducted market research to identify new business opportunities and understand customer needs
- Promoted products and services through various channels, including social media, and in-person presentations

TECHNICAL SKILLS

Coding Languages

Python, Java, C++, C, JavaScript, CSS, HTML, Rust, PHP, SQL

Programming skills (non-exhaustive)

- Machine learning AI algorithm/model development
- Backend software engineering
- Cloud and Database infrastructure management (SQL, NoSQL)
- API development and integration
- Data analysis, acquisition, research and visualization (Pandas, Matplotlib, etc.)
- Socket Programming

Additional Skills

AI/Software Consultancy, Public Speaking, Collaborative work experience, Comprehensive software testing experience

EDUCATION & QUALIFICATIONS

- **Coursera Machine Learning Specialization Certificate 2024**
- **Coursera Deep Learning Specialization Certificate 2024**
- **UNSW (2025 expected graduation)**
 - Bachelor of Computer Science (AI)/Law – Computer Science WAM 75+
 - 2023 Enactus National Social Impact Competition finalist
 - 2024 Enactus National Social Impact Competition 2nd Place
 - 2023 Beginners Mooting, Client Interviewing and Negotiations
- **Knox Grammar School**
 - 99.30 ATAR (All Rounder)
 - Premier's Award for All around excellence
 - Prefect
 - KGSACU Cadets – Cadet Under Officer (Medical)