ABOUT ME

Technical Skills Java, Python, SOL, JavaScript, Node.js, Express.js, React, HTML5, BootStrap, Tensorflow, PyTorch, Pandas, Matplotlib,

Seaborn, Scikit-learn, Git, MongoDB

Miscellaneous Jira/Trello, AWS, Machine Learning

EDUCATION

The University of Sydney

02/2021-12/2025

- Bachelor of Software Engineering Honours, Dalyell Scholar
- Recipient of the Sydney International Student Award
- Notable courses: Data Structures and Algorithms, Advanced Software Construction and Design, Data Information and Management

WORK EXPERIENCE

Academic Tutor 02/2023 - present

The University of Sydney

- Tutored ISYS2110-Analysis and Design of Web Information Systems, SOFT2201-Software Construction and Design, SOFT241-Agile Software Practices, ISYS2120-Data and Information Management, and DATA1002-Introduction to Data Science, COMP3308-Introduction to AI, COMP3888-Software Development Project
- Conveyed intricate concepts to over 200+ students by employing relatable analogies tailored to diverse learning styles
- Crafted detailed performance reports for students each semester, analyzing trends and providing actionable feedback;
 enhanced academic performance for 80% of students, resulting in improved course completion rates

Software Engineer Intern 15/2024 – present

Hanlon Industries

- Optimized API in Tekla Structures for 3D modeling of curved billboard structures, enhancing accuracy by 98%
- Applied advanced mathematical models to resolve modeling defects in curved billboard structures, reducing defect occurrence by 75% and improving rendering speed by 40%
- Refactored the codebase to ensure application's compatibility with Tekla Structures 2024 release

Summer Research Intern 11/2023 - 02/2024

Sydney Informatics Hub

- Performed thorough analysis and monitoring of workload patterns to identify optimal resource scaling strategies,
 resulting in efficient resource allocation and reduced overhead costs by 14%
- Integrated load balancing algorithms and containerization techniques to ensure efficient resource utilization, achieving a 23% increase in system performance under varying workloads
- Applied re-architecting methodologies to drive tangible improvements, delivering cost-effective and sustainable solutions in the realm of distributed computing

Backend Engineer Intern 06/2023 - 08/2023

FinTech Australia

- Implemented Fidessa API for customer order management and execution, while also developing and rigorously testing tailored solutions for regional stock transactions, resulting in a 41% increase in order processing efficiency
- Led technical architecture discussions to address scalability challenges, fostering collaborative dialogues to generate innovative solutions
- Leveraged Least Recently Used (LRU) to mitigate the impact of the black hole effect by introducing time delays to error messages, enhancing system stability and user experience, and leading to a 50% reduction in system downtime

Software Engineer Intern 02/2023 - 06/2023

WestMead Health Precinct

- Designed and revamped A-WPTAS and PCSS tests critical for evaluating users' symptoms as part of a <u>Concussion</u> <u>Detection and Action Plan App</u>
- Conducted thorough unit and integration testing using JUnit testing framework, ensuring seamless transitions between newly added test components and enhanced user interfaces
- Engineered an extensible 'Eye-tracking' module to bolster the app's concussion detection capabilities, achieving a remarkable 36% improvement in concussion detection accuracy

PROJECTS AND COMPETITIONS

Revibe | Flutter, Dart 01/2024

- Spearheaded backend development, emphasizing global sustainability efforts to track waste reduction and reward users for scanning reusable items at partner stores
- Programmed robust backend architecture designs to ensure efficient data processing and management, facilitating smooth integration of scan tracking functionalities within the app

Campus Eats | JavaScript, AJAX, Flask

11/2023

- Supervised a team of 5 to develop an interactive review systems, with integration of Google API, to let users discover nearby restaurants near USYD and make informed dining choicest
- Engineered deliverables such as fetching restaurant information and enabling real-time updates for reviews and comments using AJAX, resulting in a 32% decrease in page load times

Hue Hunt | JavaScript, JSON

10/2023

- Developed and launched Hue Hunt, a user-friendly Chrome extension simplifying color picking tasks for designers and developers, enabling effortless color capturing, history tracking, and seamless integration into projects
- Implemented key features including color selection and retaining selection history, enhancing user productivity