

Edward Ji

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Experience

Automation Developer

Feb 2022 – Present

Hudson Homes

- Streamlined weekly email reports and SQL database updates with Python, saving hours of manual work
- Migrated Microsoft SQL Server datasets with pivot-table transformations on tens of thousands of rows
- Provided technical support for office systems, diagnosing Windows issues and updating device firmware

Casual Academic

Feb 2025 – Jul 2025

The University of Sydney

- Designed and delivered introductory Python workshops to 240 students and conducted 50 oral assessments

iOS Developer Intern

Dec 2023 – Feb 2024

NetEase Youdao

- Contributed over 1,000 lines of Swift code to Youdao Dictionary, used by over 100 million monthly active users
- Implemented UIKit interfaces for Hi Echo, an AI-powered virtual speaking coach, with reusable components

Education

Bachelor of Advanced Computing and Bachelor of Science

Mar 2021 – Nov 2025

The University of Sydney

WAM: 85.6

- Computer Science and Data Science majors, Mathematical Sciences program, Advanced Computing Honours
- Dalyell Scholar by invitation, with Dalyell Global Mobility Scholarship valued at up to \$2,000
- Vacation Research Scholarship valued at \$3,000 in 2024, for analyzing the Stellar Consensus Protocol
- Undergraduate High Honour Roll in 2022 and 2023, awarded for High Distinction average in Computer Science
- Academic Merit Prize valued at \$1,000 in 2022, awarded to approximately 600 out of 74,000 by the university

High School Certificate

Feb 2018 – Nov 2020

Knox Grammar School

ATAR: 98.70

Projects

Rest2Visual 📄

Dec 2024 – Present

- Proposed a new paradigm for functional brain modeling and coauthored a research paper on our findings
- Reduced processing time for terabytes of data from days to hours using multiprocessing on HPC clusters
- Adapted state-of-the-art PyTorch models to decode visual stimuli from our fMRI predictions

eyePlay 🎧

Mar – May 2024

- Collaborated across disciplines to develop a hands-free media playback system for the physically impaired
- Real-time signal processing on SpikerBox hardware with Python, SciPy, and scikit-learn with 92.8% accuracy

Cancer Cell Structure Analysis

Jul – Nov 2023

- Collaborated with biomedical researchers to classify glioblastoma on whole-slide images, achieving 81% accuracy
- Developed key pipeline components from cell segmentation and graph construction to PyTorch Geometric classifier
- Followed Agile XP methodology, leveraged Git workflows and Jira sprints for effective collaboration

Essentials of Microeconomics 🎧

Jul – Nov 2023

- Deployed an interactive Python web app to visualize microeconomics concepts using symbolic mathematics

Matcha 🏆

Aug 2023

- Won Second Place, valued at \$1,500, at the 2023 SYNCS Hack for an AI-powered team matching app
- Deployed self-hosted APIs using pre-trained NLP models and Docker for live demo within 24 hours

Decision Royale 🏆

Aug 2022

- Won Best UI/UX and People's Choice, valued at \$2,400, at the 2022 SYNCS Hack for a decision making app
- Implemented front-end and core functionality with React and JavaScript within 24 hours

Crazy Spin 🎮

Aug 2021

- Led a team of four to develop and publish a Unity game, reaching 800 views and 70 downloads on itch.io
- Won the Junior Undergraduate Project Award valued at \$300 at the School of Computer Science Coding Fest

Technical Skills

Languages Python, Go, SQL, Bash, C, Swift, HTML, CSS, JavaScript, Java, R
Tools Unix, Git, Docker, GitHub Actions, Nginx, Cloudflare, AWS
Libraries PyTorch, NumPy, Pandas, scikit-learn, SwiftUI, React