

RUSSELL STANLEY

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Education

University of Adelaide

Mar 2019 - Nov 2022

Bachelor of Computer Science (Advanced) (Honours)

- **Courses:** Computer Vision, Evolutionary Computation, Statistical Machine Learning, Operating Systems, Algorithm & Data Structures, Web & Database Computing
- **Major:** Artificial Intelligence
- **GPA:** 6.4/7

Skills

- Programming: C++, Python, Go, Java
- Technologies: Git, Salesforce, SQL, MATLAB, Unity, Unix, OpenCV

Professional Experience

Australian Ocean Lab (AusOcean)

Adelaide, SA

Software Engineering Intern

Dec 2021 - Present

- Improved sensor capabilities by developing a computer vision-based water clarity sensor in Go. This utilised OpenCV and could run on a resource limited Raspberry Pi.
- Integrated water clarity sensor module into the Net-Receiver client Revid, this allowed water clarity measurements to be accessible in the cloud.
- Added functionality for end users by implementing live reporting of rig sensor data to the livestream chat using the YouTube APIs.

Toro Australia

Adelaide, SA

Salesforce Administrator

Dec 2019 - Nov 2021

- Administrator for service department with 25 daily users in 7 different teams across Australia.
- Saved \$1500 per month in mobile device management fees by creating a device management database with SQL and web application using Code On Time.
- Reduced technician administration time by 3-4 hours per week, through developing and deploying a modernized time management module in Salesforce.
- Decreased friction when ordering parts from the warehouse by improving the UI in Salesforce, as well as back-end processes by collaborating with the SAP Services team.

Research

University of Adelaide

Improving Space Situational Awareness

Jul 2020 - Present

- Developed a genetic algorithm for initial orbit determination in MATLAB.
- Increased accuracy of the fitness function by implementing two-body propagation instead of linear propagation.
- Simulated orbits from a two-line element set to compare the estimated orbit, obtained from the genetic algorithm with a ground truth.

Projects

Ready Trader Go

Mar 2022

- Participant in the Optiver Ready Trader Go algorithmic trading competition. Designed and developed a pair trading strategy using C++ which placed 8th in the first round.

Arbitrage Web Scraper

Jul 2021

- Built a web scraper in Python to detect arbitrage opportunities between popular sports betting websites.