

Shaun Gunawardane

Associate Member – Australia Computer Society | Student Member – Engineer Australia

Education

The University of Adelaide | FEB 2020 - JUL 2024

Bachelor of Electrical and Electronic Engineering (Honours) – Computer Engineering Major

Experience

Software Engineering Intern | FEB 2022 – SEP 2022 | Adelaide SA

Australian Submarine Corporation (ASC)

Designing a 2D modelling interface which utilises drag-and-drop mechanics, plotting tools, and dimension/measurement calculation. This application would be used by Engineers at ASC to design orthographic drawings to aid in the construction and development the Collins-class submarine. Tools: C#.

Cybersecurity Intern | NOV 2021 – FEB 2022 | Canberra ACT

Australian Signals Directorate (ASD)

The project involves investigation of communication protocols used in Industrial Control Systems. I built a DNP3 environment which simulated an electricity network. Packet capture analysis was used to assess data flow. The contributed tools and platform were used as an education platform to enable insight into cybersecurity in ICS environments. Tools: Rust, Wireshark, Power System Generator (Doble).

ADFCGP Australian Defence Force Cyber Gap Program | JAN 2021 - DEC 2021

Australian Government Digital Emerging Talent Programs

Completed various online cybersecurity assessments. **Rank 20/300** in Capture the Flag competition. Mentoring provided by Digital Transformation Agency personnel.

Competitions

International Collegiate Programming Contest (Division 2) | JAN 2021

National Rank: **25**

National Finalist - SUBS in Schools Technology Challenge | JUL 2016 - JUN 2017 | Perth WA

Hosted by: Re-Engineering Australia and the Australian Submarine Corporation (ASC)

CAD designing and Manufacturing of a Remotely Operated Underwater Vehicle. This was done using Arduino technology, electrical circuitry, and Autodesk Inventor software in a team of 5.

National Final Rank: **3**

Projects

Text-Based Chess Game | AUG 2020 - SEP 2020

C++ (Self-assigned)

A text-based chess game created through object-oriented programming. The game includes valid chess piece rules and a checking system.

Brick Breaker | DEC 2020 - JAN 2021

Java (Self-assigned)

A platformer game where the player must smash a wall of bricks by deflecting a ball off a slider. The game includes a speed change each time the ball collides with the slider. This was done utilising 2D graphics and object-oriented programming.

Programs and Leaderships

Student Mentor – Ravi's Study Program (RSP) | NOV 2021 - PRESENT

RSP is an intensive bootcamp which trains students to land internships at big tech companies with an 88% success rate. After successful results in last year's program, I was invited as a student mentor. My role involved grading, assigning work, giving feedback and teaching students programming and interviewing techniques.

Google Developer Student Club Lead for University of Adelaide | JUN 2021 - PRESENT

President of Open Source Collective – Digital student hub for University of Adelaide | JUN 2021 – PRESENT

Treasurer of the Electrical and Electronic Engineering Society of Adelaide University | OCT 2021 – PRESENT

School of Electrical and Electronic Engineering Student Representative | MAR 2021 – NOV 2021

Campus Tour Leader – O' Week Orientation Event for University of Adelaide | FEB 2021

Cyber@ANZ Program – Social Engineering and Digital Investigation | FEB 2021

National Youth Science Forum Year 12 Program (NYSF) | JAN 2019 | Brisbane QLD

Awarded a scholarship by NYSF for my acceptance into the program and received a sponsorship by the Adelaide rotary district.

Languages and Technologies

Languages: Proficient: Java, MATLAB
Experienced: C++, C#, Rust, SystemVerilog

Technologies: Wireshark, Autodesk Inventor
Adobe After Effects