



+61 422 781 233



[jaween.ediriweera@gmail.com](mailto:jaween.ediriweera@gmail.com)



[github.com/jaween](https://github.com/jaween)



5 Stralia Avenue, Hectorville,  
South Australia, 5073,  
Australia

# Jaween Ediriweera

## EDUCATION

2013 – Present **The University of Adelaide**  
Bachelor of Computer Science (Advanced)  
Diploma in Languages (Japanese)  
GPA of 6.1 out of 7.0

2008 – 2012 **Norwood Morialta High School**  
Merit (Programming)

## WORK HISTORY

**Google** (Mountain View, California)

July 2015 – October 2015

Software Engineering Internship

Ported the SDL 2 library to Google's [Mojo IPC framework](#). Additionally involved writing patches for Mojo's [OpenGL ES backend translator](#) to support unimplemented OpenGL ES 3.0 functions.

Collaborated with other engineers to bring 'Doom 3 BFG' to Mojo running on top of my SDL 2 library port. GitHub repository of my library port can be found [here](#).

**Cycling Australia** (South Australia)

November 2014 – November 2015

Contract Software Engineer

Worked with Sport Scientists and managers to design and create multiple Windows desktop applications in C# over the course of a year. Currently being used to train Olympic cyclists.

## PROJECTS

**[Real-time Stereo Scene Reconstruction](#)**

March 2015 – July 2015

Developed a partial system to produce a 3D reconstruction of a scene using stereo image pairs. Involved extracting depth information from RGB images, 'inside-out' positional and rotational tracking between depth maps, coalescing point clouds into a single geometry and finally a ray traced 3D renderer, all self implemented in OpenCL and C++. Project was under the guidance of Professor Ian Reid and used the [KinectFusion](#) paper and [InfiniTAM](#) for direction.

**Real Estate Vs. Income Maps**

August 2013 – November 2013

Scraped and map-reduced housing data using Hadoop and combined with income data for various family types (single parent, no children, etc.) to generate maps of house prices versus family incomes. Maps were generated using JavaScript and the D3 visualisation library.

**[Graphing Calculator App](#)**

July 2012 – July 2013

Coded a maths parser, arithmetic evaluator and a simple grapher. Other features included numerical integration, value-tracing over a function and a dedicated maths input keyboard. Designed and implemented the GUI and graph interaction to meet Android design guidelines.

## CS VOLUNTEERING

### Programming Challenge for Girls

November 2013 & 2014

Worked with a group of other volunteers to run the PC4G event and to teach the Alice 3D programming environment/language.

### Uni Open Day CS Outreach

August 2013 & 2014

Talked with prospective uni students and parents, played algorithm based games and worked through engineering puzzles with audiences.

### Young Women in Technology

April 2013 & 2014

Taught female high school students how to build games in the Scratch visual programming language (2013) and then again in Pencil Code (2014).

### Uni-Tech CS Teaching Sessions

April 2014

Assisted in the teaching of introductory programming sessions to high school students, with a focus on image manipulation in the Jython programming language.

## OTHER DETAILS

### Programming

Proficient in:

- C++
- Java & Android
- C# & Unity

Comfortable with:

- OpenGL
- OpenGL
- Python
- Unix & Bash

Some experience with:

- JavaScript, HTML & CSS
- SQL
- Hadoop (map-reduce projects)
- MIPS and PIC Assembly

Awards:

- Microsoft College Coding Competition (2016) Winning team 'BreakfastSearch'

### Japanese

Qualifications:

- JLPT N3 Qualification (2013)

Awards:

- JFSA Speech Contest Winner (2012)
- Merit (Norwood Morialta High School)