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github.com/jaween

Jaween Ediriweera

EDUCATION

2013 – 2017 **The University of Adelaide**
Bachelor of Computer Science (Advanced)
Diploma in Languages (Japanese)
GPA of 6.1 out of 7.0

WORK HISTORY

The University of Adelaide (South Australia)

March 2017 – December 2017

Computer Science Tutor

Supervised CS workshops, provided assistance teaching fundamental CS concepts, marked exams.

Google (San Bruno, California)

August 2016 – November 2016

Software Engineering Internship

Used an internal machine perception framework to develop visual effects (image filtering) for the Android YouTube app. This involved write a software design spec., making backend changes in Python, working with UX designers, Java frontend implementation, writing experiments and tests.

Google (Mountain View, California)

July 2015 – October 2015

Software Engineering Internship

Multimedia performance testing for [Google's Fuchsia OS](#). [Ported a C library](#) (SDL 2) to Fuchsia's C++ [Mojo IPC subsystem](#). Added support for missing OpenGL ES 3.0 functions to the [OpenGL ES backend translator](#). Real world performance testing of *Doom 3 BFG* on top of my library port.

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

Reimplemented [KinectFusion](#) to produce a 3D reconstruction of a scene using stereo image pairs. Involved depth extraction from RGB images, 'inside-out' tracking between depth maps, and finally ray-tracing a geometry of coalesced point clouds. Self implemented in OpenCL and C++.

[Graphing Calculator App](#)

July 2012 – July 2013

Implemented and published. Features include a maths parser, evaluator, grapher, numerical integrator and a dedicated maths input keyboard.

CS VOLUNTEERING

Young Women in Technology

April 2013, April 2014, June 2016

Taught female high school students how to build games and create procedural animations in the Scratch visual programming language (2013), Pencil Code (2014) and Processing (2016).

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.

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

Projects in:

- OpenCL (C and C++)
- OpenGL (C++)
- OpenCV (C++ and Python)
- MPI (C and C++)
- Unix & Bash

Lesser project experience in:

- 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)