Rukmal Weerawarana

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My Profile

I am currently a freshman at the University of Washington and an alumnus of the British School in Colombo, Sri Lanka. I have a burning passion for Computer Science, and I intend to major in it. I love to code, and I do a ton of projects in my spare time. For a full list and code, please take a look at my GitHub at http://github.com/rukmal.

I am a passionate, self-motivated and driven individual, and I hope I am the right fit for your team.

Work

Mullins Molecular Retrovirology Lab; 04/2014 - Present

At the Mullins Lab, I work in the capacity of an Undergraduate Research Assistant and Scientific Programmer. I assist lab personnel to apply computational biology techniques to better help process the large amounts of data that they acquire.

The Mullins Lab is a lab within the University of Washington's Department of Microbiology. I use Python, Perl and Shell scripting for my work at the Mullins Lab.

Skills

- Significant previous research experience
- Knowledge of a broad spectrum of programming languages, including Java, Python, JavaScript and Perl
- Experience with using a wide range of web frameworks including Node.js, Socket.io, ExpressJS and Mongoose
- Significant experience with UNIX systems

Education

University of Washington; Seattle WA - 09/2013 - Present

I am currently completing the Calculus Series, while beginning the Sophomore-level math track (MATH 124, 125, 126, 307). I have also completed the Introductory Programming classes (CSE 142, 143), and am currently taking Introductory Scientific Computing (AMATH 301).

The British School in Colombo; Colombo, Sri Lanka - 08/2009 - 06/2013

Completing my high school career at the British School in Colombo, I pursued and received 10 IGCSE's (International General Certificate of Secondary Education) in the sciences, computer studies, select social sciences and advanced mathematics.

I also pursued and completed the International Baccalaureate (IB) Diploma Program, which is an internationally-minded, rigorous and academically challenging program of secondary education. For the diploma, I studied Chemistry, Physics and Mathematics at the higher (advanced) level, while doing English, Spanish and Geography at the standard level. Additionally, we were also required to complete a personal research project and a philosophy (focussing on epistemology) class, titled *The Theory of Knowledge* (see http://www.ibo.org/diploma/).

Significant Activities and Achievements

President; British School 'Sixth form' committee - 07/2012 - 06/2013

Having started off as a member of my High School's student government the previous year, I discovered that I had both the passion and the drive to lead my school's student government. I honed my existing leadership skills through this, while complimenting them with multiple new skills.

Co-Editor of High school yearbook - 10/2011 - 07/2012

As the co-editor of the single largest publication of my school, this was an experience that tested my leadership and coordination skills. Additionally, as this was my first real leadership opportunity, it played a large role in honing my skills into what they are today.

recipient of Two 'highest achievement' Awards in physics and mathematics for the BSC class of 2013 – 06/2013

These awards are presented to a member of the graduating class, as recognition of outstanding performance in physics and mathematics throughout their senior year.

recipient of deputy principal's commendation award - 06/2013

This award is presented to students who have displayed outstanding dedication and have significantly contributed to the school community and/or participated in extra and co-curricular activities throughout the year.

Projects

GPA Manager - JavaScript - http://github.com/rukmal/GPAManager

A utility for students to manage their class GPAs, minus the stress. Built using Node.js, ExpressJS, Mongoose and other web frameworks. This project is currently in development.

NodeBlog - JavaScript - http://github.com/rukmal/NodeBlog

A full web stack blogging platform built on Node.js. This project uses Mongoose, Socket.io, Marked and other web frameworks. This project is currently in development.

UW Open Data - Python - http://github.com/rukmal/UW-OpenData

Python APIs for all of the University of Washington's online services. This project is currently being developed by myself, <u>Amit Burstein</u> and <u>Karan Goel</u>.

Leap Pong - JavaScript - http://github.com/grant/LeapPong

Play pong using the Leap Motion with a friend! Multiplayer pong game developed by myself and <u>Grant Timmerman</u> using Node.js and other web frameworks.

Husky Course Miner - Python - http://github.com/rukmal/HuskyCourseMiner

Python API to get information about classes at UW, directly from the course catalog. Built using the BeautifulSoup library.

Previous Research

International Baccalaureate Extended Essay (Physics) - http://goo.gl/dvvuki

An Analysis of Coastal Management in Sri Lanka (Geography) - http://goo.gl/rKP12A

Analyzing the Polynomial Shadow Function (Mathematics) - http://goo.gl/CS5BFZ

An analysis of the role of disagreement in the pursuit of knowledge in the natural and human science (Epistemology) - $\frac{http://goo.gl/CEku0N}{http://goo.gl/CEku0N}$