Kavisha Jayathunge

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Recent engineering graduate with experience and interest in both software and hardware design. Currently looking for a software engineering role that would allow me to expand upon and improve the skills I acquired at University.

WORK EXPERIENCE

Kelvin Nanotechnology, Glasgow, United Kingdom – *MEng intern*
JUL 2018 – DEC 2018
Researched an experimental method of substrate cleaning in the University of Glasgow's Nanofabrication centre. The study involved analysing large amounts of image data, for which a bespoke commandline tool was developed.

Thom Micro Systems, Falkirk, United Kingdom – *App developer*
JUN 2017 – AUG 2017
Summer internship in which a prototype contract costing application was created. The purpose of the placement was to determine whether the Xamarin Forms IDE was a suitable tool to develop a multi-platform application with a single codebase. Produced working Android and Universal Windows applications.

Subcity Radio, Glasgow, United Kingdom – *Volunteer web developer*
OCT 2016 – APR 2018
Worked sporadically during studies to create a visual sitemap of the Subcity website for archival purposes. Performed various maintenance duties in moving the website's codebase from PHP to Python.

EDUCATION

University of Glasgow, United Kingdom – *MEng Electronics and Software Engineering*
SEP 2014 – JUN 2019
DEGREE - 2:1

Subjects included:
Algorithms and Data Structures, Functional Programming, Web App Development, Realtime Embedded Systems, Control Systems, Digital Electronics, Analogue Electronics.

Dissertation: "The Efficiency of CO_2 Snow Jet Cleaning on Semiconductor Wafers"
Developed a commandline Java application for processing microscope imaging data. The application counts the number of particles in an image and displays them sorted by area. It was distributed to potential users on Node Package Manager.

Additional information:
Participated in a charity hackathon hosted by J.P. Morgan (Code for Good). Worked with Django in a team to develop a web application for a non-profit organization.

Arab Unity School, United Arab Emirates – *A–levels*
SEP 2012 – JUN 2014
MATHEMATICS, PHYSICS, CHEMISTRY – A, A, A

PROJECTS

Raycasting – *Personal project*
A simulation of a light source interacting with opaque walls. Written in Javascript, using the p5.js library and hosted on github.

Beacon Tracking GUI – *Team project*
A third-year university project in which the team worked closely with an external client to provide a graphical way to display and update the position of multiple tracking devices on a floorplan. Written in Javascript using the Meteor.js framework, and using d3.js for data visualisation.

Electronic Design Project – *Team project*
A second-year university project to design, prototype and build a heart-rate monitor using a microcontroller and analogue signal processing.

Game of Life Visualiser – *Personal project*
A simple program that displays the evolution of patterns in Conway's Game of Life. Written in Java and hosted on github.

Ultrasound communications – *Team project*
Experimented with underwater power transmission and communication using ultrasound. Involved the use of a full bridge rectifier, a power management IC, and programming of an Arduino microcontroller using C.

SKILLS

Programming languages

JAVA	JAVASCRIPT	HASKELL
PYTHON	C	UML
HTML	C++	
CSS	C#	

Software packages / Tools

ECLIPSE IDE	GIT	NPM
ORCAD PSPICE	P5.JS	NUMPY
ORCAD PCB EDITOR	D3.JS	LATEX
XAMARIN FORMS	JQUERY	
ANDROID STUDIO	IMAGEJ API	