SPURRYA JAGGI

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WORK EXPERIENCE

BDO Solutions
Software Consultant
Winter 2016

- Developed features on a multi-tenant applicant using MVC patterns in .NET (C#), using concepts such as Dependency Injection (IoC).
- Performed Data Integration using 'SQL Server Integration Services'.

DBRS
Software Engineer
Spring 2015

- Implemented REST features with .NET (C#) and Angular.js (directives and services) such as allowing analysts to track rating committee minutes, reducing the duration of meetings by ~30 minutes.
- Developed Excel add-in in C# to import, parse, and export data

Knowroaming
Web Developer
Fall 2014

- Created a browser testing GUI using JavaFX and Selenium to create automated test suites, increasing unit test coverage by 80%
- Lead the development of mobile website using PHP, jQuery and Java, which was used directly by the customers.

Maple Leaf Foods
Security Analyst
Winter 2014

- Analysed and identified malcious bugs across the network, got introduced to security, networking and protocols.
- Found a worm using IronPort which would multiply itself and would send over 35,000+ malicious emails during weekend.

RECENT PROJECTS

Space Invaders
Nov 2015

- Programmed space invaders in C for Keil microcontroller. Used a multi-threaded architecture, semaphore locks and hardware interrupts to interface with peripherals and used peripherals such as joystick.

Pebilepsy
Sept 2015

- **'Best Pebble App'** at Hack the North by developing a nocturnal epilepsy tracker and prevention application. Developed an Android platform where the data is instantly uploaded to web, recording and visualizing the seizure-like incidents.
- Featured On : Hacker News, DevPost , Med Gadgets

Path Follower
Sept - Dec 2015

- Configured, tested sensors, and programmed microcontroller using C creating a path following robot. Illumated surface with infra-red LED and steered the robot using photo-diode.

Potentiometer
March 2015

- Calibrated an infrared sensor output using Arduino,C and Python to fit a curve to predict the distance from an object with 0.15 cm accuracy

Music Notes
November 2015

- Used frequency analysis to transcribe classical piano pieces into sheet music using MATLAB. Resynthesised the notes clip and used statistics to determine accuracy.

Sugar Nanny
Jan 2016

- **'Top 10'**, **'Best Life-saving app'** and **'Best use of AWS'** at UoT Hacks Created front-end features in Angular that track sugar-level, and provides insulin recommendation based on food intake.

SKILLS

Languages:
Java, C#, C++, C, Python, MATLAB

Frameworks:
Microsoft .NET, jQuery, Angular, Node.js, Express, Selenium

Database:
MySQL MongoDb MSSQL

Other:
Powershell, Azure

Embedded:
FPGA, PLC, Arduino, Keil

EDUCATION

University of Waterloo
3A Mechatronics Engineering
Graduating May, 2018

LEADERSHIP

Machine Learning Presentor
Informed large professional audience (40+) on neural networks, deep machine learning and advanced machine learning.

PCB Design Director
Introduced PCB Design best practices, introductory level common mistakes and demoed EAGLE software.

Networking Director
Led the organization and marketing of a student-alumni networking event.