SPURRYA JAGGI

Email : spurrya@gmail.com
Website : spurrya.com
Github : github.com/spurrya

SKILLS

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

Web:
Angular, Bootstrap, jQuery, Undersore, SQL, MongoDB, Node.js, Tomcat

Tools:
Git, SVN, RabbitMQ, LINQ, Powershell

Testing:
Chai, Mocha, Selenium

Embedded:
PLC, FPGA, Keil, Arduino

LEADERSHIP

Networking Director
Led the organization and marketing of a student-alumni networking event, boosting attendance by 250%.

Residence Ambassador
Encouraged high school students to join Waterloo by giving guided residence and campus tours

COMPETITIONS

Capture The Flag 1 & 2

Hack The North 2015
Completed a series of programming challenges using Python. Placed among top five contestants.

EDUCATION

University of Waterloo
2B Mechatronics Engineering
Graduating May, 2018

WORK EXPERIENCE

DBRS
Software Engineer
Toronto, ON
Spring 2015

- Implemented full-stack features on internal web app using C#, Angular and Entity Framework, saving over 200 hrs/month
- Verified and migrated databases from Oracle to SQL Server using C# scripts and, re-mapped 2000 mismatched entries

Knowroaming
Web Developer
Toronto, ON
Fall 2014

- Created a browser testing GUI using JavaFX and Selenium to quickly create automated test suites, thereby increasing end to end and unit test coverage by 80%
- Led the development of the mobile website using jQuery and PHP.

Maple Leaf
Security Analyst
Mississauga, ON
Winter 2014

- Aggregated infrastructure security statistics of 500 servers into an Excel Spreadsheet with Selenium and Java saving 10 hrs/week
- Detected critical cyber-security flaws such as worms, malware, trojans using FireEye, ePo and IronPort.

PROJECTS

Pebilepsy
Developer
Sept 2015

- Won best pebble award at Hack the North by developing a nocturnal epilepsy tracker and prevention application.
- Featured On : Hacker News, Challenge Post , Med Gadgets

Path Follower
Embedded Developer
Oct 2015

- Soldered, configured and tested sensors and motors onto a PCB layout creating a path following robot.
- Programmed the robot in C and tested each component using oscilloscope, signal generator and power supply.

Keil Projects
Embedded Developer
Oct 2015

- Developed a C program for a Keil microcontroller to dynamically allocate memory in O(1) time.
- Implemented quick sort using a multi-threaded architecture which included priority tasks and semaphores.

Distance Sensor
Algorithms Developer
March 2015

- Calibrated an infrared sensor using Arduino and Python to fit a curve to predict the distance from an object.
- Used machine learning algorithms like Nearest Neighbour Search and other statistical technqiues to improve accuracy to 0.15 cm

Crib
Web Developer
June 2015

- Built a chat app with a realtime poll for large groups of students to discuss housing options, implemented using Node.js and Socket.io
- Developed entirely in 24 hours as part of AngelHack Toronto 2015

Airless Tire
Analyst

- Used Solidworks, MATLAB and ANSYS to design a CAD model of an airless tire and simulate stress deformations across terrains

Noise Filtering
Developer

- Removed noise from audio clips using signal filters made in MATLAB
- Accurately reported the number of peaks in the filtered audio clips.