GUNIN KHANNA

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SKILLS

LANGUAGES: C, C++, Java, VHDL, Swift, Assembly Code, MATLAB, Groovy

FRAMEWORKS & LIBRARIES: Mean.js, Bootstrap

OTHERS: Git, XML, FPGA, Agile Methodologies , HTML, CSS, API Testing, SoapUI, JSON, JIRA

AWARDS

University of Waterloo · Engineering International Student Scholarship
• Extraordinary overall performance, awarded to 20 international students

University of Waterloo · President's Scholarship of Distinction
• Obtaining an overall incoming average above 95%

UXP Systems · Certified Scrum Team Member

EDUCATION

University of Waterloo

Computer Engineering, Honours, Co-operative Program

Relevant Courses
• Operating Systems • Embedded Microprocessor Systems • Data Structures and Algorithms • Electronic Circuits • Digital Circuits and Systems • Fundamentals of Programming

ACTIVITIES

Hackster's Club

- Assisted in a drone implementation, including hardware design to make it cost effective

Mathematics blog

- guninkhannamathematics

Front-End development

- Designed and developed my personal website

EXPERIENCE

UXP Systems

Toronto, ON

QA Automation Engineer · Jan 2017 to May 2017

- Worked on an Agile project with Vodafone, **3.2 million** active users, to implement a layer of functionalities such as SAML login, registration, authentication and CSR control
- Implemented API testing using *SoapUI, JSON, Postman, Git, CURL* in a *UNIX box* with a **98.9%** automotive coverage
- Developed *Groovy scripts* to retrieve Captcha, session-id, cookies and created data tables in the database using *SQL*
- Designed and developed automated tests for CWC Flow, ULM and streaming service, using *Java, Selenium WebDriver, XML, TestNG* and increased the coverage by **87.6%**

SOTI Inc

Mississauga, ON

Quality Assurance Analyst · May 2016 to Sep 2016

- Implemented functional, integration, regression and performance testing for SOTI's Web and Mobile applications for features such as Remote Control and Geo Restrictions
- Successfully assisted the team to decrease the battery consumption by the service for Android users by **16%**
- Compiled and tested software builds on multi-OS (Android, iOS and Windows), and documented bugs in a JIRA repository

AKTC

New Delhi, India

Electrical Engineering, Intern · May 2015 to Jul 2015

- Worked with Havells and Kalinga Cables in order to generate specification for AKTC customers
- Assisted in the implementation of a concrete vibrator and developed skills such as *soldering*, *breadboard*, *IC analysis* and *Multisim*
- Tracked and maintained product turns (cables, vibrators) and existing inventory levels by communicating with buyers and co-workers

PROJECTS

Spore

- Worked in a team to build a web platform that provides organizational tools for students; technologies used *Node.js, Java, MongoDB* and *Angular 2*
- Developed a parser to allow students to seamlessly export course information to our calendar or third-party calendar
- Designed and implemented an algorithm to intelligently read critical dates and information from the course outline with an accuracy of **92.3%**

Path - Android Application

- Determines and displays a path between two points on an indoor map that updates based on user position
- Designed and implemented a *pedometer algorithm*, by identifying patterns from the accelerometer readings in a finite state machine to determine when a step is taken
- Filtered raw sensor data to account for noise and bias by using the *low pass filter* which attenuates high frequency signals

Data Structures and Algorithms

- Developed a Trie Data Structure, a **26-ary** tree, using *recursive* programming
- Implemented a Hash Table data structure, used *linear probing* to resolve collision, constant time for insert and remove operations **(O(1))**
- Minimum Spanning Tree (MST) of a weighted undirected graph, using the Kruskal's Algorithm, with each edge having a positive weight, represented the graph using adjacency matrix