# **GUNIN KHANNA**

💌 g3khanna@edu.uwaterloo.ca 🔇 http://guninkhanna.xyz in guninkhanna 🕠 guninkhanna

## SKILLS

LANGUAGES: C, C++, Java, VHDL, Swift, Assembly Code, MATLAB, Groovy FRAMEWORKS & LIBRARIES: Mean.js, **Bootstrap** 

OTHERS: Git, XML, Circuit Design, JIRA, FPGA, Photoshop, Agile Methodologies, SoapUI, API Testing, HTML, CSS

## A\X/ARDS

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

- An organizational tool for students to manage their time better.
- Worked in a team to build the web platform using Angular 2, Java, Git, Bootstrap, MongoDB, HTML and CSS

## 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.