

# Upneet (Kim) Randhawa

Computer Engineering  
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## EDUCATION

### Bachelor of Applied Science in Computer Engineering, 3<sup>rd</sup> Year

2014-Present

University of Toronto  
Deans List (2015)

## TECHNICAL SKILLS

- Programming Languages: C++, C, Java, swift, JavaScript, Python, SQL, matlab, HTML.
- Relevant courses: Algorithms and Data Structures, Networks, Operating Systems.
- Hardware Languages: Verilog, Assembly
- Operating System: UNIX, Windows, MAC OS X
- Applications: NetBeans IDE, Xcode, Adobe Photoshop and After Effects, Microsoft Office Suite

## RELEVANT ENGINEERING PROJECT

### Pokedex

Summer 2016

- My personal/side project.
- An iOS app written in Swift.
- A database showing relevant information and traits of all Pokémon's.
- Used Alamofire and JSON to parse Pokemon API.

### Maps

January 2016 – April 2016

- A C++ software program that provides functionality similar to google maps with some additional features
- Read in database of all intersections and streets in a city, draw the resulting map using OpenGL and let the user interact with it.
- Finding travel routes between two intersections and give directions.
- Locating Point of interests, traffic view, streets based on user queries.
- Used Dijkstra's Algorithm, Greedy Algorithm, DFS and implemented travelling salesman problem.

### Ball Separator

Winter 2016

- In a team of two, using Assembly language we programmed and designed a Ball Separator.
- Balls separated on the basis of their sizes. Later, a crane was used to store them in different containers
- The whole process was automated.

### SMS Security System (SSS)

Fall 2015

- In a team of two members, we Designed and built a Security System for our course project.
- It was programmed as such that whenever there is something between the sensors the program sends a text message to the owner.
- used Altera DE1-SOC FPGA , 3G module and Verilog for programming the project.
- Photo-resistors and lasers were used as a physical interface.

### Domain Name Server

Fall 2015

- A database to store and retrieve data
- It can rapidly lookup Domain Names and return the corresponding Internet Protocol(IP) address
- Implemented database using Binary Search Tree.

### Resistor Network Simulator

Fall 2015

- A program for storing resistors in a circuit
- Implemented a command parser for input commands by the user
- Calculating the effective resistance at a node or in the whole circuit.

### TEAM MEMBER, Engg. Strategies and Practices Project, U of T

Winter 2015

- Collaborated with the design team of six members to develop new waste management methods for General Motors Oshawa Assembly Plant with an allocated budget of \$60,000.
- As a team we composed Project Requirements, Conceptual Design Specifications, and Final Design Specifications documents.
- Presented the proposal to the client and the project manager to justify the feasibility of the proposed solution.

## WORK EXPERIENCE

Network Support and Cable Technician, IIMSWISS Corp., Brampton.

Summer 2015

- Troubleshooting and maintaining a daily check of large database of GPS devices for Trailer Tracking.
- Completed both premises and off-site installations of network cable.
- For premises installations, ran cables, installed network outlets, drilled unobtrusive holes for running lines and performed testing.
- Experienced in the installation, termination, and testing of CAT6 and CAT5E copper, fibre-optic etc.
- Inspected the sites prior to installation to plan the cable pathways and calculated the material and the equipment's needed for installation.
- Record time and materials used on daily work assignment.
- Worked professionally and effectively in a team.

Customer Service Representative, Husky Energy, Brampton.

Aug 2014 - Jan 2015

- Worked as a Cashier and car-wash Operator.
- Keep balance sheets of amount received and transactions.
- Maintained stock inside as well as outside the store properly.

## AWARDS AND ACCOMPLISHMENTS

- **Deans List** (+3.5 GPA), U of T WINTER 2015
- University of Waterloo President's Scholarship 2014
- University of Waterloo Engineering Entrance scholarship 2014

## AFFILIATIONS AND MEMBERSHIP

- Student Member, IEEE 2015 - present

## EXTRA-CURRICULAR ACTIVITIES

- Publicity Director, SSA, UofT 2015 – present
- UTASC Cricket Tournament Winter 2016

## SKILLS

- Conducting quantitative analysis, research and gathering data and data management
- Demonstrated team leadership, organization and management in team projects
- Strong analytical skills, leadership and teamwork skills.
- Creative, out-of-the-box thinker, with strong conceptual and problem solving skills.
- Report filing, documentation scanning and uploading to electronic databases
- Compile, organize and register documents
- Brainstorming options and solutions.
- Preparing and conduction of Presentations.
- Working with confidential information.

## COMMUNICATION SKILLS

- Developed, implemented and achieved effective liaisons with interests.
- Can communicate in four different languages (English, Punjabi, Hindi and Urdu)