

# RAMANDEEP FARMAHA

2B Systems Design Engineering Student

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## SKILLS

### Programming Languages:

Java, Python, C++, Javascript, Bash/Batch, HTML, CSS

### Tools:

Cassandra, Apache Spark, Amazon Web Services, JUnit, Git

## EXPERIENCE

### Software Engineer Intern

*May 2015 – August 2015*

#### Seeq Corporation

*Seattle, WA*

- Develop bulk and multithreaded read/write performance tests for Seeq's custom Java Cassandra drivers
- Automate Seeq and multi-node Cassandra cluster deployment on AWS
- Upgrade backend logging implementation from log4j to logback
- Conduct bug fixes in the java codebase

### Junior Web Developer (Co-op)

*September 2014 – December 2014*

#### Raymond James Ltd.

*Toronto, ON*

- Create web-based financial calculators using AngularJS and Bootstrap
- Design and implement JSON-based document databases with AngularJS frontends
- Design, build, maintain internal and external websites
- Develop web-based tools using PHP

### Project Coordinator (Co-op)

*January 2014 – April 2014*

#### Manulife Financial

*Toronto, ON*

- Develop, improve user experience design, and provide major launch of internal websites and wikis using HTML and CSS
- Develop User Application Test Cases for major IT software implementation
- Assist portfolio management by developing automated Excel – based monthly reporting
- Develop key project management documentation
- Assist on Shared Service/Centre of Expertise Playbook development

## EXTRA-CURRICULAR ACTIVITIES

### Midnight Sun Solar Car Race Team

*January 2015 - Present*

#### Business Manager

#### University of Waterloo

- Manage and raise funds for the \$250,000 solar car project
- Streamline operations and procedures within the team using cloud-based apps
- Plan and coordinate tour across major cities in Southern Ontario
- Use CRM tools to develop sponsorships and supervise co-op students
- Represent the solar car team during exhibitions and other events

Engineering Society Representative

*September 2013 – August 2014*

**University of Waterloo**

- Attend biweekly meetings to discuss issues and event planning
- Vote on issues relating to Waterloo engineering students

## RELEVANT PROJECTS

NBA Prediction Engine

*August 2015 - Present*

- Utilize the NBA stats API to retrieve player data
- Attempt to build machine learning algorithms that predict player score rate based on key factors such as player performance, court position and defense

GreenLeaf Design Project

*September 2013 – December 2013*

**SYDE 161**

- Provide a solution for small-scale urban gardening application
- Develop user requirements, QFD analysis, hierarchical task analysis
- Conduct cost/benefit analysis of different solutions via LFP and HFP rapid prototyping
- Design virtual prototype of product using Solidworks
- Conduct usability and functional testing
- Create product using 3D printed parts and fibre glass

## EDUCATION

Candidate for Bachelor of Applied Science

*September 2013 – Present*

**Systems Design Engineering**

University of Waterloo

- 3.9 GPA

CS190.1x Scalable Machine Learning

*July 2015 – August 2015*

**University of California, Berkeley edX**

- Conduct labs on Machine Learning concepts such as regression, principle component analysis (PCA) and gradient descent using Apache Spark and Python
- Finish course with an A grade

International Baccalaureate Diploma

*September 2009 – May 2013*

**Glenforest Secondary School**

- Graduated with highest percentage marks in Physics and Chemistry (99%)
- 96 percent graduating average

## ACHIEVEMENTS

President's Scholarship of Distinction

*September 2013*

**University of Waterloo**

- Awarded to high school students entering university with a 95% or higher average