

# PATRICIA MARUKOT

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## EDUCATION

### University of Toronto

MAY 2020

Bachelor of Applied Science and Engineering - Computer Engineering

#### Achievements

Dean's List

2016 - 2017

2017 - 2018

#### Relevant Coursework

Intro to Databases • Algorithms & Data Structures

• Computer Systems Programming

## TECHNICAL SKILLS

Programming Skills		Databases	Application Servers	Tools
▫ Java	▫ JavaScript ES6	▫ MySQL	▫ Apache Tomcat	▫ IntelliJ
▫ Java Spring	▫ AngularJS	▫ MSSQL	▫ Node JS	▫ WebStorm
▫ Hibernate	▫ C/C++	▫ MongoDB		▫ Eclipse
▫ HTML/CSS	▫ Bootstrap	▫ PostgreSQL		▫ Adobe Photoshop

## EMPLOYMENT HISTORY

### Full-stack Software Developer (PEY)

MAY 2018 - SEPT 2019

Destiny Solutions Inc.

TORONTO, ON

#### Highlights and Responsibilities:

- Implemented SAML login using Shibboleth server for numerous clients
- Reduced instructor login time from 2-3 minutes to < 2s through SQL query optimizations
- Worked with internationalization (I18N) team to introduce a Spanish language pack
- Worked with a team to implement proctor exam schedule calendar using DHTMLx scheduler
- Analyzed corrupt client data and wrote correction scripts using MSSQL queries to fix data relating to a complex financial system

Tools: Java, Java Hibernate, Spring Framework, Struts Framework, MSSQL, Mercurial

## SOFTWARE PROJECTS

### Analog Circuit to Signal Flow Graph Visualizer

MAY 2019 - PRESENT

- Lead a team of 4 to design a RESTful single page web application that generates a transfer function and signal flow graph of a user input circuit
- Implemented Mason's Gain Formula calculation to compute transfer function using modified depth first search algorithm
- Implemented UI for circuit visualization using SVG elements
- Implemented UI for node-edge graph visualization using Cytoscape.js library

Tools: Javascript ES6, Node JS, HTML, CSS, Git

### Algebraic Math Library

DEC 2019

Github Link: <https://github.com/trishamrkt/rwalgebra>

- A math library for parsing, storing, and manipulating algebraic equations in both the real and complex domains
- Implemented tokenization and Shunting Yard algorithms for algebraic string parsing
- Created API to support algebraic operations including addition, subtraction, multiplication, division, and exponentiation

Tools: Node JS