

# Shalin Patel

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## EXPERIENCE

### PAGERDUTY | Software Engineering Intern

May 2021 - Present | Toronto, ON

- Mobile Core team

### PRONTI AI | Software Engineering Intern

January 2021 - April 2021 | Kitchener, ON

- Lead Android developer of flagship **Android** application using **Java** following **MVP architecture**, deployed to **5000+** users.
- Created **regression testing** system for flagship android application using Java, JUnit, Mockito, and Espresso allowing for the discovery of **>50** bugs and inefficiencies.
- Decreased time taken for backend requests by **80%** using **Flask and PostgreSQL**.

### DOPPL INC | Software Development Intern

May 2020 - August 2020 | Kingston, ON

- Implemented a **route optimization algorithm in C++** similar to the Travelling Salesman Problem, achieving  **$O(n \log(n))$  runtime** for the average client use case.
- Created a consumer application for **1000+** users using **React Native, Apollo GraphQL, and Golang**.
- Constructed a client front-end for asset tracking and routing using **React** and tested using **Jest**.
- Developed admin dashboard using **React, Node, Express, and MongoDB** creating effective control of critical database tables.

### ONTARIO MGCS | Infrastructure Technologies Services Co-op

May 2019 - August 2019 | Toronto, ON

- Worked with IBM's Privileged Identity Manager to handle access management for the secure data servers at the Data Center Operations sector in MGCS.
- Designed an algorithm and developed a GUI to successfully automate the process of user modifications in PIM **achieving ~35 reduced man-hours per week**.
- Optimized SQL queries in SSMS sent through PowerBI reports achieving a **7-fold decrease in time**.

## PROJECTS

### MOODIFY | Hacklytics 2021

Python, text2emotion, Spotify API, Twitter API

- A python bot which tweets a generated spotify playlist based on the emotions captured from a tagged tweet using text2emotion.
- **Won Best Machine Learning Hack at Hacklytics 2021.**

### SOLAR POWER GENERATORS

Python, Pandas, Matplotlib, Scikit-learn

- Program that successfully predicts power generation and irradiation of solar panels with **88% accuracy**.
- **Cleaned data using pandas**, detecting for missing values and replacing them with their respective means.
- Performed **EDA** using **MatPlotLib** to graph the data, identify trends and form initial hypotheses.
- Implemented DecisionTree and **XGBoost Regressor** models using **Scikit-Learn** to validate hypotheses.

## SKILLS

### LANGUAGES

Python • C • C++ • Java •  
Javascript • Bash • HTML5 •  
CSS3 • SQL • Golang

### TECHNOLOGIES

Git • AWS • React • Docker •  
PostgreSQL • JUnit • GraphQL  
• Mockito • Espresso • Numpy •  
Azure • Node • Flask • FastAPI  
• Linux • MongoDB

## EDUCATION

### UNIVERSITY OF WATERLOO

Bachelor of Computer  
Science

2018 - 2023