

Mitravasu Prakash

Software Engineer | University of Toronto Hatchery

[in](https://www.linkedin.com/in/mitravasu-prakash) linkedin.com/in/mitravasu-prakash github.com/Mitravasu mitrivasuprakash.netlify.app
[+1-647-947-5052](tel:+16479475052) mitravasu.prakash@mail.utoronto.ca

SKILLS

- **Languages:** Java, Python, HTML, CSS, JavaScript, C, SQL, PHP, GraphQL
- **Framworks and Libraries:** Node.js, Express.js, React, Vue, jQuery, Bootstrap, JUnit, NumPy, Electron, Flask, Tailwind
- **Databases:** MongoDB, MySQL, PostgreSQL, Neo4j, MS Access
- **Tools and Technologies:** Git, JIRA, Docker, WordPress, NetlifyCMS, Postman, Linux, Figma, Adobe XD

EDUCATION

University of Toronto

September 2019 - June 2023

Honours Bachelor of Science, Statistics Co-op (CGPA: 3.23)

Specialization in Machine Learning and Data Mining

Relevant Courses: Software Engineering, Databases, Data Structures and Algorithms, Machine Learning, Web Applications, Assembly

WORK EXPERIENCE

Software Engineer (Backend)

June 2022 - September 2022

Basis Technologies

Software Engineer

September 2021 - Present

University of Toronto Hatchery

Tech Stack: PHP, SQL, JavaScript, jQuery, AJAX, Wordpress, Tailwind

- Developed a portal that allows administrators to schedule automatic emails sent to different startups
- Designed SQL queries and schemas to streamline the automatic email management process

Software Engineer

January 2021 - August 2021

University Health Network

Tech Stack: PHP, SQL, JavaScript, Wordpress, MS Access, Visual Basic, Python

- Developed a payroll portal used by 50 employees bi-weekly to submit their work hours
- Implemented automatic reminder and summary emails to add transparency between employees and their project managers
- Reduced database redundancies by 31% by conducting audits and normalizing research data in a MS Access database

PROJECTS

Analysis of Stock Market Fluctuations

November 2021 - December 2021

Tech Stack: Python, Scikit-Learn, Matplotlib, Pandas, NumPy, Jupyter Notebooks

- Developed multiple regression models using the CBOE Volatility Index historical dataset from 1990 to 2021
- Identified key factors affecting fluctuations in the Stock Market by analyzing regression models
- Classified the CBOE Volatility Index historical dataset into 5 different regimes and predicted the likelihood of the stock market to switch between regimes.

AfriConnect

May 2021 - September 2021

africonnect.netlify.app

Tech Stack: React, Express.js, Node.js, JavaScript, Bootstrap, MongoDB

- Worked with an **Agile Scrum** team to develop an e-learning web-app for the African Impact Initiative
- Used **JIRA** to help track the progress of the project and distribute tasks effectively.
- Designed the **REST API** to store, update and access user information securely.
- Designed front-end interfaces for users to modify their profile information and view information about other users

Rideshare API

July 2021 - August 2021

Tech Stack: Java, Docker, Neo4j, MongoDB, PostgreSQL

- Developed a **REST API** following the **Microservice architecture** that allows developers to access information about all trips
- Wrote **JUnit** tests to eliminate manual testing of all endpoints.