

# MOHAN VASHIST

🌐 mohanv.me, 📧 MohanVashist1, ✉ mohan.vashist@mail.utoronto.ca

## TECHNICAL STRENGTHS

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### Programming Languages Software & Tools

Python, JavaScript, C/C++, Java, Bash, SQL  
HTML 5, CSS 3, Latex, React, React Native, MongoDB, Unix,  
Jenkins, Docker, Ansible, Neo4j, Flask, FastAPI, Git, Express

## EDUCATION

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### University of Toronto

Major in Computer Science, minor in Statistics and Economics.

*September 2017 - Present (Third year)*

Cumulative GPA: 3.3

## WORK EXPERIENCE

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### National Bank of Canada, Toronto

*Software Engineer*

January 2019-August 2019

*Python, Java, Agile*

- Worked with the **Securities Lending** team and followed the **agile methodology** to create and update software used to inform stakeholders about **fees and positions**
- Wrote **Python** code that **automated** compliance tasks increasing productivity and reliability by 15%
- Fixed production server to **reduce the downtime** by 100% and increase efficiency for the entire team

## OPEN SOURCE CONTRIBUTIONS

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### Surpriver

Find high moving stocks before they move using anomaly detection and machine learning

**Python, Machine Learning**

- Contributed to a project on Github which has **over 750 stars** by adding **support for Crypto currencies** as well as **fixing undiscovered bugs**

## RESEARCH PROJECTS

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### Texture Synthesis

Expand and fill an image to extend what it looks like seamlessly

**Python, Computer Vision**

- Research project focused on texture synthesis by non parametric sampling adapted from researchers at UC Berkley
- Implemented an **efficient Python algorithm** that utilizes the techniques of texture synthesis, thus enhancing upon the research from UC Berkley

## PROJECTS

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### CryptoViz

Watch list and live prices for Crypto Currencies

**Python, JavaScript, React**

- Built **High Performance** Python back end that utilizes the **FastApi** framework and the **Uvicorn ASGI** server
- Created an elegant front end that is built with **React** and integrates the **TradingView** charting library

### Planit

Itinerary and trip planning mobile application for both iOS and Android

**Python, JavaScript, React Native, Agile**

- **Lead** a team, gave **technical directives** and followed the **agile methodology** to produce a cross platform **Android** and **iOS** using **React Native**
- Integrated **multiple Apis** including the **Google Places**, and **Google maps** Api with a **Flask** backend.

### Personal Website

Personal Website which hosts a showcase for my projects and articles written

**TypeScript, React, Next.js, Serverless Functions, GitHub API**

- Used Serverless Functions to fetch my repos and their stats using the GitHub API
- Followed material design patterns