

# Abhishek Chakraborty

abhishek.chakraborty@mail.utoronto.ca | 514-585-3850

Website: <https://abhichakra.github.io> | GitHub: [github.com/abhiChakra](https://github.com/abhiChakra)

## EDUCATION

---

**UNIVERSITY OF TORONTO** | Toronto, ON | 3<sup>rd</sup> Year Student (2017 - Expected Dec. 2021)

Candidate for Honours Bachelor of Science – Computer Science & Statistics

## SKILLS

---

**LANGUAGES:** Python, JavaScript, Java, SQL, R

**FRAMEWORKS/LIBRARIES:** Flask, React, Node, Express, Pandas, JavaFX, Matplotlib

**TOOLS/SERVICES:** Docker, Kubernetes, Nginx, Google Cloud Platform (GCP), PostgreSQL

## EXPERIENCE

---

**CIBC Data Studio** | *Software Developer Intern* | Waterloo, ON January – April 2020

*React, Nginx, Flask, Docker, Google Kubernetes Engine (GKE), PostgreSQL, Pandas*

- During COVID-19 crisis, developed and deployed within **single week** an emergency info-querying web-app for CIBC contact centres. Anticipating **300+ daily** users.
- App uses **React-Nginx** web-server with **Flask-WSGIServer** application-server.
- Containerized with **Docker** and deployed onto a GKE **Kubernetes** cluster configured as web/app server **Deployments** exposed using **LoadBalancer** & **ClusterIP** services.
- Developed a cost-management web-app featuring user-authentication, file-upload and data storage using **PostgreSQL** DB on **GCP SQL**. Deployed onto GCP **VM Instance**.
- Developed updates for a Flask web-app featuring analytics using **jQuery** and **chart.js**.

**Staples Inc.** | *Software Engineer Intern* | Mississauga, ON January – April 2019

*Java, Python, Matplotlib, Agile environment (Scrum)*

- Developed a **Java** simulator to **test robotic efficiency** for a project implementing mobile robots in Staples' supply warehouses, as similarly shown **here**.
- Programmed simulator's output statistics and visuals for robot movements with **Python** using **Matplotlib** library with pyplot and animation.
- Implemented **dynamic robot routing** on a warehouse floor grid with **A\* algorithm**.
- Drastically reduced robot collisions with **Quadtree** DS and **directed edge graphs**.

## PROJECTS & WRITINGS

---

Build and Deploy a Web-App | **Medium**

Two-part article outlining a React-Flask web-app development and deployment process.

Restman Restaurant Manager | *Java, JavaFX* | **GitHub**

Synchronized **Java** system that manages food orders and displays relevant analytics such as menu item popularity and periodic sales using **JavaFX**.

WordLookup Chrome Extension | *Wordnik API, Chrome API* | **GitHub**

Extension enables easy lookup of words by highlighting word and clicking icon.