# Abhishek Chakraborty

abhishek.chakraborty@mail.utoronto.ca | 514-585-3850 | Website: abhichakra.github.io | GitHub: github.com/abhiChakra

## **EDUCATION**

University of Toronto - 3<sup>rd</sup> Year Student (Expected Aug. 2022)

Candidate for Honours Bachelor of Science - Computer Science Specialist, Statistics & Maths Double Minor

## **SKILLS**

Languages: Python, JavaScript (ES6), Java, SQL

**Frameworks/Libraries**: Flask, React.js, Redux, Node.js, Express, Jest, Enzyme, Pytest, Matplotlib **Tools/Services**: Docker, Kubernetes, Nginx, Google Cloud Platform (GCP), Google Kubernetes & Compute Engine, PostgreSQL, MongoDB, AWS Elastic Beanstalk (EB), TravisCI

#### **EXPERIENCE**

#### CIBC Enterprise Innovation | Software Developer Intern

Sept. - Dec. 2020

Redux, Jest, Enzyme, Pytest, Docker, GCP Cloud Build, Red Hat OpenShift Toronto, ON (Remote) Supervisor's (Hao Lin- Senior Data Scientist) work term evaluation: **Outstanding Performance** (7/7)

- Delivered an interactive web-app for CIBC Capital Markets consisting of a **React-Redux** front-end (Nginx server) paired with a **Flask-PostgreSQL** REST API backend (WSGI server), using **Pytest** for unit-testing.
- Built a CI/CD pipeline using Google Cloud Build triggers to automate Docker containerized testing as well as containerized app deployments to GCP Compute Engine VM instances.
- Initiated a TDD practice for React-Redux code by writing dozens of unit tests with Jest and Enzyme.

### CIBC Data Studio | Software Developer Intern

Jan. - Apr. 2020

React.js, Nginx, Flask, Docker, Google Kubernetes Engine (GKE), PostgreSQL, Pandas Waterloo, ON Supervisor's (Stephen Xie- Software Developer) work term evaluation: **Outstanding Performance** (7/7)

- Spearheaded the development of an urgent COVID-19 info-querying web-app for CIBC contact centres.
- Applied a scalable web-app deployment procedure through Kubernetes on GKE clusters.
- Developed and deployed several full-stack web-apps for prominent bank stakeholders featuring chart
  analytics using chart.js, cookie-token user-authentication, file-upload and data storage/fetching using
  cloud PostgreSQL databases.

#### Staples Inc. | Software Engineer Intern

Jan. – Apr. 2019

Java, Python, Matplotlib, Agile environment (Scrum)

Mississauga, ON

Supervisor's (Sandeep Sikka- Dir. Robotics Eng.) work term evaluation: **Outstanding Performance** (7/7)

Developed a **Java** simulator to **quantify robotic efficiency** for a project implementing mobile robots in Staples' supply warehouses, as similarly shown **here**:

- Simulator featured **dynamic robot routing** using **A\* algorithm**, collision avoidance using **Quadtree** datastructure and curated warehouse floor statistics.
- Visuals for robot movements were traced with Python using Matplotlib library with pyplot and animation.

#### **PROJECTS**

RateARental Web-App | MERN, Docker, AWS EB, TravisCl, Mongoose | Link, GitHub

Web-app where users can create an account to receive and give reviews about rental listings.

Restman Restaurant Manager | Java, JavaFX | GitHub

Synchronized POS system manages workflow as well as curates and displays analytics using JavaFX.

**Miscellaneous**: I often write technical software development articles on Medium.