Abhishek **Chakraborty**

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Github: github.com/abhiChakra

EDUCATION

UNIVERSITY OF TORONTO | Toronto, ON | 2017 – Present (Expected May 2021)

Candidate for Honours Bachelor of Science – Computer Science & Statistics

Relevant Courses: Data Structures & Analysis, Software Design, Computer Organization, Linear Algebra, Multivariable Calculus, Statistics for Computer Science

SKILLS

LANGUAGES: Java, Python, JavaScript, Verilog, R

TECHNOLOGIES: Android, Git, Unix

TOOLS: IntelliJ, PyCharm, Visual Studio Code, Android Studio

EXPERIENCE

SOFTWARE ENGINEER INTERN – STAPLES INC. | January – April 2019
Worked in Agile development environment as lead developer of warehouse robotics simulator. Simulator serves to model and test algorithms for multi-robot processes.

- Developed **discrete** and **event-based Java** simulator system. Created simulator output graphs and animation with **Python** using **Matplotlib** library with pyplot and animation.

- Implemented dynamic robot routing using **A* algorithm**. Featured robot-collision avoidance using grid **segment-locking** system with multi-robot deadlock detection using **directed edge graph**.

- Simulated warehouse order timings using **Poisson process** and worked with **Quadtree** data structure for object **collision detection**.

PROJECTS

RESTMAN Restaurant Manager | Github: Java-Restaurant-Management-System
- Synchronized system helps manage employee tasks and prepares relevant analytics such as menu item popularity and periodic sales.
- Frontend developed using **JavaFX** and backend using **Java**.

WORDLOOKUP Chrome Extension | Github: Google-Chrome-WordLookup-Extension
- Extension allows user to easily lookup word definition by highlighting word and clicking extension icon.
- Utilized **Wordnik API** for word data along with **Google Chrome API**
- Used **HTML** & **CSS** to design extension pop-up and **JavaScript** and **jQuery** to query, receive and parse data.