# Rafid Khan

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#### **EDUCATION**

# **Rochester Institute of Technology**

Rochester, NY

Anticipated Graduation: Spring 2023

- Bachelor of Science in Computer Science
- Bachelor of Science in Applied Mathematics

## **PROJECTS**

### **Stock Options Return Calculator** (Python)

- Built a calculator that uses the Black-Scholes formula to estimate returns at a range of dates and potential underlying prices. The estimations are based on implied volatility which is calculated from the current price of the selected options and the current price of the underlying stock or ETF.
- The application is displayed to the user using Kivy, a Python GUI framework, and derives calculations through the TD Ameritrade Options Chain API.

## Slide Puzzle Solver (Java)

- Implemented a playable and solvable sliding numbers puzzle, with a separate PTUI and GUI which utilizes JavaFX that uses a common model which adheres to the Model-View-Controller design pattern.
- Numbered blocks are randomly arranged on an NxM board with a single free space that a numbered block can be slid into. The goal is to arrange the numbers numerically in ascending order from left to right and top to bottom. The puzzle is internally solved using a BFS algorithm. The user can attempt to solve the puzzle themselves or prompt the game for a hint which solves the next move.

## Athan (Swift)

- Created a WatchOS application that displays the daily Islamic prayer times according to the user's inputted location, by utilizing the Al-Adhan API. The application will send a push notification at the time of the prayer to the user.
- The application is currently pending approval to be listed on the Apple App Store.

#### EMPLOYMENT EXPERIENCE

#### **Bangladesh Permanent Mission to the United Nations**

New York, NY

Front End Development Intern

Summer 2021

- Worked with senior developers to maintain and update the official website using ReactJS.
- Assessed and provided feedback on UX and UI designs for technical feasibility, to create a more dynamic, and user-friendly website.

#### **Latos Latos & Associates PC**

New York, NY

IT Intern

Summer 2019

- Provided desktop support to attorneys, and associates, including hardware repair, application setup, installation, and troubleshooting.
- Established and maintained digital communication software, including email, user logins, and passwords; this includes setting up new employees with company email accounts and providing them with access to the network.