# Steven Baksa

sab468@scarletmail.rutgers.edu | NJ 08816 | 732-735-3380

#### **EDUCATION**

## Rutgers University School of Arts and Sciences - New Brunswick

2017-2021

B.A., Mathematics; Minor Computer Science

Coursework: Data Structures, Design and Analysis of Algorithms, Database Management, Intro to AI and ML, Mathematical Theory of Statistics, Data Science, Linear Optimization, Probability Theory, Combinatorial Theory, Graph Theory, Real Analysis, Linear Algebra

#### RELEVANT EXPERIENCE

NJ TRANSIT Summer 2019

Software and Technical Intern

Newark, NI

- Implemented web scraper reporting statuses of multi-million dollar equipment and cars train cars
  - O Automated time-consuming task emailed daily to the entire mechanical department for liability of annual federal regulation checks on the company
  - Webscraped internal site of several webpages that displayed status of trains using scripts of python libraries(BeautifulSoup, Pandas) to extract them daily
  - o Analyzed status of train data and created a script that sent out visualized data daily using VBA to hundreds of employees
- Improved data collection of Historical Train Database used in API for mobile-app
  - Examined displayed data collected from hardware on Jupyter and corrected them based on any discrepancies in scheduling
  - o Calculated adjustments for more accurate readings of mileage across the fleet

### **PROJECTS**

- Flightinator full-stack traveling web app (2020) <a href="https://github.com/zain08816/Flightinator">https://github.com/zain08816/Flightinator</a>
  REACT | EXPRESS | NODE | SQL | AWS
  - o Flightinator is a web app that fully displays and assists customers' flight booking
  - o Implemented editable log-in features for each user dynamically updating each flight whenever users book and schedule, or when any adjustments to flights occur
- Visualized AI pathing algorithms (2020) <a href="https://github.com/SBaksa/Visualized-A-Star">https://github.com/SBaksa/Visualized-A-Star</a>
  JAVASCRIPT | HTML | CSS
  - o Visualized A-Star is a simple algorithm for pathing that was visualized for a better understanding of its traits
  - o Implemented several versions of A-star(weighted/heuristics/certain distancing/obstacles) using grids which demonstrated A-star's path memory-usage/time complexity/vision through obstacles(rivers,blockades, slow areas)

#### **SKILLS**

<u>Languages:</u> Java, Python, Javascript, HTML-CSS, SQL, VBA, Matlab, MAPLE <u>Technologies:</u> Reactjs, Expressjs, Nodejs, MySQL, Rstudio/rShiny, Git, Docker **ACTIVITIES** 

- HackRU Organizer 2020
  - o Bi-annual hackathon hosted by Rutgers organization with attendance of 1000+ hackers
  - o Organized portions of the logistics regarding the well-being of each hacker during the weekend stay