Steven Baksa

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EDUCATION

Rutgers University School of Arts and Sciences - New Brunswick **2017-2021**

B.A., Mathematics; Minor Computer Science

***Coursework*:** Data Structures and Algorithms, Database Management and Creation, 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, NJ*

- Implemented web scraper reporting statuses of multi-million dollar equipment and cars – train cars
  - Automated hours of time-consuming tasks emailed daily to the entire mechanical department (3000 members) for liability of federal regulation checks on company hardware
  - Webscraped internal site of several webpages that displayed hundreds of trains statuses using scripts of python libraries(BeautifulSoup, Pandas) to extract them daily
  - Analyzed and visualized scraped data of trains using VBA and Excel which was emailed out daily to the department
- Improved data pipeline of Historical Train Database used in API for mobile-app and federal auditing
  - Manipulated thousands of entries of data using Jupyter notebook for visualization displayed in mobile app with high user-traffic
  - Automated and created multiple MS SQL queries for processing data collections to be made accessible on MS ACCESS for yearly auditing

PROJECTS

- Flightinator full-stack traveling web app (2020) - https://github.com/zain08816/Flightinator
  REACT|EXPRESS|NODE|SQL|AWS
  - Flightinator is a full-stack CRUD web app that fully displays and assists customers' flight booking
  - 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 (2021) - https://github.com/SBaksa/Visualized-A-Star
  JAVASCRIPT|HTML|CSS
  - Visualized A-Star is a simple algorithm for pathing that was visualized for the education of its traits
  - 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 map generations

SKILLS

Languages: Java, Python, Javascript, HTML-CSS, SQL, VBA, Matlab, MAPLE
Technologies: Reactjs, Express, Flask, Node, MySQL, Rstudio/rShiny, Git, Docker

LEADERSHIP

- HackRU Organizer 2020
  - Bi-annual hackathon hosted by Rutgers organization with attendance of 1000+ hackers
  - Handled logistics for the 1000+ students/attendees ensuring safety and comfortability