

Alexander Williams

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Developer looking for an entry-level or internship opportunity at a startup

SKILLS:

Python, Javascript, Ruby, React, Rails, Electron, REST, SQL, HTML, CSS, Semantic UI, SASS, Linux

PROJECTS:

Cruze, HackNYU, Drexel University

March 8, 2020

- Created a routing algorithm which utilized local bike infrastructure data to increase safety
- Created original weighted-routing algorithm, imported data from Open Data NYC, and utilized ArcGIS' REST API, won 1st Place Health & Sustainability and Best Sports Hack

<https://devpost.com/software/cruze>

DirExit, DragonHacks, Drexel University

February 22, 2020

- Created a raspberry-pi fire exit sign, intelligently routing evacuees to unblocked exits
- Designed pathing with backtracking and lossy compression algorithms in Python, worked on final product integration and visualization, won 1st Place Overall and Best Data Analysis & Visualization

<https://devpost.com/software/direxit>

MTA Status App, Flatiron School

December 6, 2019

- Created a CLI application with a partner which parsed real-time MTA train data to provide live status updates and provide the user with turn-by-turn directions to the nearest train station along with the trains and their statuses at that station. Created all API integrations and backend.

<https://github.com/Miss-Cheese/module-one-final-project-guidelines-nyc-web-111819>

EDUCATION:

Flatiron School, New York City, NY

November 2019 – March 2020

- Full time, in person, 3 ½ month long intensive bootcamp
- Learned full stack web development

Northeastern University, Boston, MA

September 2018 – April 2019

- Majoring in Computer Engineering, Math, and Physics
- Currently on long-term hiatus, three years into a triple major B.S. degree

Bard High School Early College Queens, Long Island City, NY

September 2014 – July 2018

- Earned Associate of Arts degree alongside high school diploma

WORK EXPERIENCE:

Assistant Researcher, Northeastern Math Department

February 2019 – January 2020

- Studied high-dimension complex analytic singularities using Python, Sage Math and Singular, using random generation via a complex Markov chain
- Discovered infinite family of polynomials with negative Lê cycles

VOLUNTEERING:

Safe Water Project, Code for Boston Brigade

March 2019 – April 2019

- Cleaned and analyzed decades of EPA water testing data using Python and Power BI
- Worked towards creating predictive statistical models forecasting contaminant-likely water sources to improve enforcement and improve water quality