

# RY SONKO

Brooklyn, NY - (845) 287-9591  
[rsonko04@gmail.com](mailto:rsonko04@gmail.com) - [github.com/ryreadme](https://github.com/ryreadme)

## PROFESSIONAL SUMMARY

Dynamic and detail-oriented software engineer with 2+ years of experience in Python programming with a passion for computer science and developing innovative programs that will enhance our products, services, and experiences. Eager to apply data engineering and full-stack experience to your firm. In previous roles, successfully boosted retention rate by 15% and improved site responsiveness by 40%.

## SKILLS

Python, Javascript, Pandas, Django, RESTful APIs, Git, HTML/CSS, React, PostgreSQL, Selenium, Machine Learning, Object Oriented Programming, Problem Solving, Data Structures & Algorithms, AWS, WSGI

## WORK EXPERIENCE

### **Data Engineer, University of Virginia Sustainability**

**01/2020 - 05/2020**

- Systematized move-in/move-out day processes in collaboration with a team of 4 data engineers for University of Virginia Sustainability reducing waste by 20%.
- Extrapolated on current waste trends and reports simulating future aggregate waste to identify 2 “red” and “orange” zones in need of optimization to meet 2025 waste reduction targets.
- Developed framework, metrics, and reporting to ensure progress can be measured, evaluated and improved.

### **Data Engineer, C4K**

**01/2020 - 05/2020**

- Classified data by “natural” clustering into new attendance groups using unsupervised machine learning to overhaul C4K’s nondescript grouping system, and decreasing C4K’s high turnover rate by 15%.
- Prototyped a KNN (K-Nearest Neighbors) model predicting month(s), age(s), and reason(s) for departing high schoolers from C4K; thereby increasing data descriptiveness by 50%.
- Support the development of performance dashboards that encompass key metrics to be reviewed by non-profit founders and senior management.

## PROJECTS

### **Rotation**

- Designed a full-stack web music sharing app with Python, JS, RESTful APIs, and integrated Spotify’s third party API where users can create, join, and update rooms; and choose the number votes required to change a song.

### **Google Maps Dakar**

- Re-engineered a clone of Google Maps using Mapbox’s API, JS, and HTML/CSS improving Dakar’s navigation for vacationers by designating holiday hotspots, adding geolocations, and yielding an estimated 30% uptick in travel efficiency.

### **A\* Search Algorithm**

- Virtualized the a\* search algorithm with Python and pygame starting from a specific starting node of a graph and finding a path to the designated ending node in either the least distance travelled or the shortest time.

## EDUCATION

### **B.A. Foreign Affairs**

University of Virginia

**May 2020**