

Braden Scott Edwards, MS

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[LinkedIn](#) | [GitHub](#)

High-potential, results-driven candidate with solid academic background and professional experience that includes software programming, data analysis, and statistical research. Passionate about mathematics, science, and solving interesting problems; Loves learning new skills and developing expertise in a variety of fields.

Professional Experience

Data Analyst, Kennell and Associates, Inc - Washington, DC

Jul. 2018 – Oct. 2022

- **Queried and analyzed data** Collaborated on research projects, serving as the data expert for availability, best practices, and how to best analyze and present the findings. Coded in SAS and Python to create queries for large projects and ad hoc requests
- **Maintained monthly surveys** Regularly maintained SAS code to adapt to the most recent data needs, ensuring highest quality data
- **Reviewed data applications** Ensured applications for military data requests met HIPAA standards to protect patient privacy

Technical Support Analyst, Epic Systems Corporation - Madison, WI

Sept. 2016 – Oct. 2017

- **Ensured clients' IT teams received top-level support** Supported four clients with their technical questions and system go-lives, adjusting their configuration to their specific needs and keeping them up to date on the latest updates
- **Boosted end users' productivity** Increased overall hospital efficiency which ultimately led to better health outcomes for patients
- **Adopted new concepts rapidly** Learned system features, implementation tools, and underlying M code language quickly on the job

Education and Skills

Master of Science: Computer Science, Applied Math (Scientific Computing)

May 2023

New York University - Graduate School of Arts and Science, New York, NY

Relevant Coursework: High Performance Computing, Fundamental Algorithms, Programming Languages, Numerical Methods, Operating Systems

Bachelor of Arts: Mathematics, Statistics, Chemistry (Minor)

June 2016

Northwestern University - Weinberg College of Arts and Science, Evanston, IL

• C++ • Python • Rust • Ruby • Rails • Julia • Git • Go • Racket • MatLab • ML • Mathematica • R • SAS • SQL • Problem Solving • Algorithms • Data Structures • Data Analysis

Programming Projects

Advent of Code: Programming Puzzles (Rust)

Winter 2023

- Built a set of solutions in Rust to various programming puzzles to solve a series of programming problems with varying difficulty
- Progress tracked through GitHub. Each problem consists of 2 parts, with the second part involving higher complexity.
- Solutions require a wide range of skills, applying different algorithms (Dijkstra, Aho-Corasick) and data structures to ensure accuracy and efficiency

Capstone Project: HPC Simulated Annealing Optimizer (C++ and Python)

Spring 2023

- Developed a simulated annealing algorithm from scratch and adapted it to run on a distributed network
- Meta-algorithm easily adaptable to various optimization problems including traveling salesman and graph coloring
- Techniques used involve OpenMP and OpenMPI paradigms for local and network wide parallelization
- Tested and gathered results on the NYU Greene HPC Cluster
- Results synthesized in final presentation and paper

Labs: OS Modules (C++)

Fall 2022

- Implemented 4 commonly used OS modules: linker, process scheduler, memory manager, and I/O scheduler
- Followed design specifications and ensured programs passed various test cases
- Over 2000 lines of code in total

Final Project: FFT Stock Price ML Model (Python)

Spring 2022

- Developed hypothesis with partner to test effect of Fast Fourier Transform features on machine learning model for stock prices
- Coded and trained LSTM model using PyTorch. Incorporated granular stock data and its calculated FFT features
- Synthesized results into final report and presentation for class final