Michael Krah

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EDUCATION

Boston University | Boston, MA — Expected May 2025

B.A. in Computer Science, Minors in Data Science & Anthropology

GPA: 3.98

National Merit Scholarship Recipient

Graduate Coursework: Computer Graphics, Computer Vision, Randomized Algorithms

Coursework: Software Engineering, Machine Learning, Database Design, Probability in Computing, Discrete Math, Linear Algebra, Functional Programming, Algorithm Analysis, Computer Systems, Distributed Systems

EXPERIENCE

L.L.Bean | Freeport, ME — Jun 2024 – Aug 2024

Data Engineering Intern

- Collaborated with stakeholders on the data marketing and marketing analytics team to identify, document, and model requirements for Mixed Media Modeling In-Housing efforts, resulting in $500,000 in annual savings
- Led cross-team effort to model order data flows for vendor reporting, compiling technical details and analyzing orders captured in internal data warehouse, highlighting gaps and identifying previously missed stream of returns
- Developed set of unit tests with Pytest, improving data pipeline reliability for large scale data extraction
- Applied analytical skills to assess business requirements and customer journeys for a pilot rental program, working with a team to present solutions for online integration to over 200 employees at all-hands IS meeting

Department of Computer Science | Boston University — Jan 2023 – Present

Course Assistant and Grader

- Led office hours, helping groups of 10-15 students master critical concepts and solve complex analytical problems
- Created rubrics, graded assignments, and provided comprehensive feedback for classes of 200+ students
- Coordinated with fellow staff and professors to maximize availability and address course challenges

PROJECTS

Spotify Personal Activity Visualizer

- Developed web application to record and store real-time personal Spotify listening activity, visualizing music listening habits and displaying frequent songs, genres, and artists; currently hosted on personal website
- Used Node.js, Express.js, and HTML to render front-end webpage; fetched listening data using the Spotify API; stored over two years of historical data in a MongoDB database

Covid Data Analysis

- Extracted public health policy and Covid case data from disparate sources to conduct in-depth analysis of public policy impact on factors such as cases, deaths, and recoveries with a team of four
- Designed data pipelines in Azure Data Factory; loaded data in Synapse; analyzed and visualized data in PowerBI
- Created a detailed final report highlighting most important policies informed by data analysis

CNN for Medical Image Categorization

- Optimized a convolutional neural network in TensorFlow with custom hyperparameters, testing various techniques to enhance validation, increasing accuracy in detecting malignant cancer cells from 78% to 93%

SKILLS

Programming: Python, Java, C, JavaScript, Golang, OCaml

Tools: Git, UNIX, JSON, Node.js, Django, HTML, CSS, SQL, Apache Airflow, Microsoft Azure, Google Cloud Platform

PERSONAL

Honors: National Merit Finalist, Dean's List (6 semesters), AP Scholar with Distinction, Suffolk Book Award

Language Skills: Fluent English and French, Intermediate German, Novice Spanish

Citizenship: American and Austrian Citizenship