

JOEL BRANDINGER

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EDUCATION

Tufts University

B.S. Data Science

Medford, MA

September 2020 – May 2024

- Minors: Mathematics & Computer Science
- GPA: 3.7 / 4.0
- **Relevant Courses:** Data Structures, Algorithms, Machine Learning, Statistical Pattern Recognition, Big Data, Cyber Security, Web Programming, Computer Vision, Machine Structure, Probability, Statistics, Linear Algebra, Calculus 1-3

EXPERIENCE

Wayfair

Software Engineer

Boston, MA

July 2024 – Present

- Developing and optimizing routing algorithms to enhance supplier-to-consumer delivery efficiency, utilizing .NET, C#, and SQL leading to a reduction in delivery times
- Conducting comprehensive API testing and integration with Postman, ensuring a robust and reliable fulfillment process within Wayfair's supply chain network

Tufts University

Machine Learning Research Assistant

Medford, MA

November 2023 – May 2024

- Collaborated with a professor in the Urban & Environmental Policy department contributing to a study aimed at optimizing water resource management in Karachi, Pakistan through advanced predictive analytics
- Utilized Python and R to analyze dataset of water usage from households, employing machine learning techniques such as multiple regression, spectral clustering, and decision trees to predict water usage patterns

JumboCode

Software Developer

Medford, MA

September 2023 – April 2024

- Member of student-run organization dedicated to delivering pro bono software solutions to nonprofits and charities
- Leveraging technologies and tools including TypeScript, React, Next.js, MongoDB, and Python

Principal Financial Group

Software Engineer Intern

Des Moines, IA

May 2023 – August 2023

- Contributed to development and maintenance of a large-scale data warehouse for Enterprise Data & Analytics department
- Built ETL applications using Informatica Power Center to facilitate data population and curation
- Utilized AWS EC2 instances to extract data from Salesforce using Python and SQL

Prentiss Hockey Performance

Data Analytics Intern

Stamford, CT

May 2022 – August 2022

- Conducted in-depth data analysis to identify key performance indicators for hockey athletes, enabling evidence based decision-making and customized training programs
- Collaborated with coaching staff to streamline data collection and implement performance assessments

SKILLS

Programming Languages: Python, C, C++, C#, Java, JavaScript, SQL

Tools & Frameworks: PyTorch, TensorFlow, SciKit-Learn, Spark, React, Next.js, HTML, CSS, AWS, GCP, Git, Informatica

Spoken Languages: Swedish (native), English (fluent), Spanish (intermediate)

PROJECTS

Chimpanzee Size Estimation

Data Science Capstone

Medford, MA

September 2023 - May 2024

- Innovative project harnessing the power of Python, OpenCV, PyTorch, and SciKit-Learn to develop a computer vision model for accurate size measurements of chimpanzees, utilizing pose estimation and instance segmentation algorithms
- Collaborated with the Kibale Chimpanzee Project and Tufts Simulation Lab to revolutionize the field of non-invasive research and conservation, providing vital scientific insights

Spotify Song Recommendations

Statistical Pattern Recognition

Medford, MA

April 2023

- Applied unsupervised machine learning techniques to analyze a dataset of Spotify songs, resulting in identification of distinct musical clusters based on various audio features

ADDITIONAL EXPERIENCE

Tufts University Varsity Ice Hockey Team

Member

Medford, MA

September 2020 – March 2024

Two Sigma Tutors

Tutor

Boston, MA

August 2022 – January 2024

