

# JOEL E. BRANDINGER

616-516-7638 | [jbrandinger99@gmail.com](mailto:jbrandinger99@gmail.com) | <https://www.linkedin.com/in/joelbrandinger>

## EDUCATION

**Tufts University**  
*B.S. Data Science*

**Medford, MA**

*September 2020 – May 2024*

- Minors: Economics & Mathematics
- GPA: 3.65 / 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

## PROFESSIONAL EXPERIENCE

**Principal Financial Group**

**Des Moines, IA**

*Software Engineer Intern*

*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**

**Stamford, CT**

*Data Analytics Intern*

*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
- Assisted in maintenance of data management system to ensure accurate and accessible data for ongoing analysis and reporting

## PROJECTS & OUTSIDE EXPERIENCE

**Scholar Puck Track**

**Medford, MA**

*Personal Project*

*September 2023*

- Full-stack web app to effectively track and visualize NCAA hockey commitments from various junior hockey leagues across North America
- Implemented using EliteProspects API, DynamoDB database, and AWS CI/ CD pipeline. Backend in python, frontend in JavaScript and React

**Spotify Song Recommendations**

**Medford, MA**

*Tufts University*

*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
- Explored upgrading the K-Means algorithm to a Gaussian Mixture Model to leverage probabilistic modeling to capture complex data distributions and improve accuracy and flexibility of song clustering

**Image Classification Model**

**Medford, MA**

*Tufts University*

*November 2022*

- Utilized feature engineering techniques to optimize a logistic regression model for binary image classification
- Generated model with lowest error rate on unseen testing set in class of 120 students

## SKILLS

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

**Tools & Frameworks:** PyTorch, TensorFlow, Spark, React, HTML, CSS, AWS, GCP, Git, Informatica

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

## ADDITIONAL EXPERIENCE

**Tufts University Varsity Ice Hockey Team**

**Medford, MA**

*Member*

*September 2020 – Present*

**Two Sigma Tutors**

**Greater Boston, MA**

*Tutor*

*August 2022 – Present*

## AWARDS & ACHIEVEMENTS

**All-Sportsmanship Team**

**New England**

*New England Small College Athletic Conference*

*Winter '22 - '23*

**Henrik Zetterberg Scholarship Award**

**Michigan**

*Michigan High School Hockey*

*March 2018*