# Aleksandar Jovanovic-Hacon

ajovanov@mit.edu | (385)-528-9392 | linkedin.com/in/aleks-jov-hacon/

## EDUCATION

**Massachusetts Institute of Technology**                    Aug 2021 - Dec 2024

*Bachelor of Science, Mathematics and Computer Science*; 4.7/5.0 GPA,

- Expected Graduation: December 2024
- Relevant Coursework: Discrete Math, Algorithms 1, Algorithms 2, Machine Learning, Statistics and Probability, Fund. of Programming, Real Analysis, Data Visualization, Computer Vision
- Societies and Activities: Varsity Lightweight Rowing, Phi Sigma Kappa (President)

**University of Utah**                    May 2017 - May 2021

*High School University Program, Gap Year*; 4.0/4.0 GPA

## WORK EXPERIENCE

### *Uncountable Inc, Software Engineering Intern*

San Francisco, CA │ May 2024 - Aug 2024

- Closed over 100 feature request tickets by efficiently diagnosing and resolving user-reported issues, contributing to faster product iterations and customer satisfaction.
- Developed a new runsheet and table builder feature, which optimized data processing times and enhanced user experience with more intuitive controls and expanded customization options

### *MIT Media Lab, Undergraduate Researcher*

Cambridge, MA │ Aug 2023 - Feb 2024

- Led the creation of a transformer-based embedding conversion method aimed at harmonizing word embeddings from diverse Large Language Models (LLMs), improving modularity and efficiency
- Expanded existing embedding visualization tools by integrating advanced dimensionality reduction techniques such as PCA, T-SNE, and UMAP, allowing researchers to uncover patterns in high-dimensional data with greater clarity.
- Migrated multi-gigabyte embeddings into a high-performance vector database, boosting query efficiency by 40% and enabling real-time data exploration for large datasets.

### *Velvet Financial Services, Junior Software Engineer*

Salt Lake City, UT │ May 2022 - Aug 2023

- Developed and deployed over 50 mobile-responsive web pages as part of the final website, contributing to a seamless and user-friendly online experience across various devices.
- Utilized a full stack skill set for front-end (HTML, CSS, JavaScript) and back-end (Node.js, Python) development.
- Aided the creation of an AI tool streamlining investment onboarding, automating document parsing, data extraction, and listing generation.

### *Massachusetts Institute of Technology*, *Teaching Assistant, Physics*

Cambridge, MA │ Aug 2022 - Jan 2023

- Served as one of four teaching assistants in a hands-on course with 60 students, meeting three times a week; prepared lesson materials and participated in coordinated planning meetings.
- Organized and led voluntary study sessions before each midterm, enhancing student preparation and deepening my own understanding of the material.

## SKILLS

**Programming:** Python, React, Redux, HTML, Go, R, Java, Javascript
**Math:** Machine Learning, Calculus, Statistics & Probability, Linear Algebra, Discrete Math, Differential Equations, Optimization
**World Languages:** Fluency in English, Spanish, and Serbian

**Software:** Github, Docker, Pandas, Tableau, Scikit, Linear, Figma (design), Material UI, PyTorch, LaTex