

# Joshua Towner

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Local: 744 Columbus Ave, Apt. 410A, Boston, MA

Permanent: 186 Country Club Way, Kingston, MA

## EDUCATION

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**Northeastern University**, Boston, MA

2017 – Present

**Khoury College of Computer and Information Sciences**

**GPA:** 3.94/4.00

Candidate for a Bachelor of Science in Computer Science/Physics and Math

May 2021

Candidate for a Master of Science in Computer Science (PlusOne)

May 2022

*Relevant Courses:* Object Oriented Design    Algorithms    Machine Learning  
Applied Analysis    Linear Algebra    Optimization and Complexity

## COMPUTER KNOWLEDGE

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**Languages:**    *Proficient:*    Java, Python, SQL, JS, HTML, CSS, Dart,  $\text{\LaTeX}$

*Familiar with:* Sass, C++, C, C#, Octave, Bash, VB, Go

**Software/APIs:** *Proficient:*    Linux/Win/macOS, Android, Git, Docker, NumPy, SciPy

*Familiar with:* AWS, GCP, Gitlab/Github/Circle CI, Kubernetes

## ACTIVITIES AND PROJECTS

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**Society of Physics Students**, Webmaster

May 2018 – Present

- Created a Jekyll website as the Webmaster for the Society of Physics Students club

**Husky Competitive Programming Club**, Member

Sep 2018 – Present

- Programmed competitively in Java and C++ for the Husky Competitive Coding club

**Independent Projects**

- Implemented a grammar analysis tool in Java using Natural Language Processing

## WORK EXPERIENCE

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**Mercari**, Boston, MA

Jul 2019 – Present

Backend/ML Software Developer

- Aided in the construction of Python machine learning recommender systems for the Mercari web and mobile interfaces, which has over 25 million users.
- Reorganized the Python recommender microservices and coordinated their interaction within Docker and Kubernetes along with a Go based routing API.

**Northeastern University Venkatachalam Lab**, Boston, MA

May 2019 – Oct 2019

Undergraduate Research Assistant

- Created machine learning models to detect nematode neurons from three-dimensional microscope scans.
- Utilized Python, specifically SciPy and Keras, to create and boost the neuron detection model.

**Harrow Search**, Boston, MA

Oct 2018 – Jun 2019

Software Developer

- Developed web scraping application for social media profiles employing Selenium in Python
- Integrated Django and Python backend with a Node.js and React frontend

**Northeastern University ResNet Resource Center**, Boston, MA

Jun 2017 – Present

Computer Technician & Development Lead

- Directed and contributed to development of an Android app and REST API in Java to aid students in monitoring Ethernet port status for 10,000+ ports

## INTERESTS

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Video Games (any Paradox game, Elite) • Skiing • Charity Biking • The Office, Star Wars, Marvel  
Machine Learning • Artificial Intelligence • Algorithms • Optimization • Quantum Mechanics