

# Joshua Towner

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Local: 10-20 Leon Street, #6221, 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:** 3.93/4.00

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 Artificial Intelligence  
Applied Analysis Linear Algebra Optimization and Complexity  
Quantum Mechanics Machine Learning Theory of Computation

**Sacred Heart High School**, Kingston, MA 2013 – 2017

## COMPUTER KNOWLEDGE

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**Languages:** *Proficient:* Java, Python, HTML, CSS, JS, Dart,  $\text{\LaTeX}$   
*Familiar with:* SQL, PHP, Sass, C++, C, C#, Octave, Erlang, Bash, VB

**Software/APIs:** *Proficient:* Linux/Windows/macOS, Jekyll, Android Studio, MS Office, Git  
*Familiar with:* Kubernetes, Docker, Node.js

**Certifications:** CompTIA A+, Apple Certified Mac Technician, Dell Hardware Certified Technician

## 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
- Created an automated scheduling tool in C++ using Linear and Constraint Programming

## WORK EXPERIENCE

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**Mercari**, Boston, MA Jul 2018 – Present

Backend 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 – Present

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

- Serviced over 500 computers as a senior data and hardware technician for a technical support center serving over 20,000 students
- 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
- Supervised university IT repair center and managed office Linux and Windows servers

**Loomis Sayes & Company**, Boston, MA

Jun 2015 – Aug 2015

Server Architecture Intern

- Coordinated with team to develop a smart news agent in Erlang and Riak
- Created an HTML/CSS/Java frontend for customers to subscribe themselves to specific types of news

## 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