

# Joshua Towner

<https://joshua.towner.xyz>  
josh@towner.xyz

505 Congress St Unit 911, Boston, MA  
781-361-9585

## EDUCATION

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**Northeastern University**, Boston, MA Sep 2017 – May 2021  
Bachelor of Science in Computer Science/Physics and Math **GPA: 3.96/4.00**  
*Relevant Courses:* Object Oriented Design Algorithms Machine Learning  
Quantum Mechanics Applied Analysis Optimization and Complexity  
*Activities:* Society of Physics Students Webmaster Husky Competitive Programming Club

## COMPUTER KNOWLEDGE

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**Languages:** *Proficient:* Java, Python, SQL, JS, TS, HTML, CSS, React,  $\text{\LaTeX}$   
*Familiar with:* Go, C#, C++, C, Mathematica, Bash, VB, Sass, Octave  
**Software/APIs:** *Proficient:* Linux, Profiling, CI, Android, Git, Docker, NumPy, SciPy, AWS  
*Familiar with:* GCP, Gitlab/Github/Circle CI, K8s

## WORK EXPERIENCE

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**Amazon Web Services**, Boston, MA Jul 2021 – Present  
Software Development Engineer II

- Architected, coordinated, developed, and deployed key features of a new hybrid backup service, including data upload, error reporting, and a proprietary incremental diff solution, all at AWS Scale.
- Improved team processes, including release and security management. Led sessions regarding the service and onboarding. Mentored new team members, including an intern that completed their project on time.

**Anna**, Remote Sep 2019 – May 2021  
Lead Software Engineer

- Architected and developed a smart vending machine system, including real-time approvals of orders, pre-ordering, and serial communication with the machine, including deployment onto AWS and scalability.
- Managed the entire engineering team, efficiently planning out work and new features.

**Intuit**, Boston, MA Jun 2020 – Dec 2020  
Software Engineering Co-op

- Developed and released full stack features in the Quickbooks contractor payment system, which helped host 30,000+ contractors and move 60+ million dollars.

**Mercari**, Boston, MA Jul 2019 – Dec 2019  
Backend/ML Software Co-op

- Spearheaded redesign of Python and Java recommender systems reducing resource usage by 92%, adding online capabilities, and improving recommendations serving 25 million users.

**Northeastern University Venkatachalam Lab**, Boston, MA May 2019 – Oct 2019  
Undergraduate Research Assistant

- Utilized Python, specifically SciPy and Keras, to create and boost a nematode neuron detection model.

**Harrow Search**, Boston, MA Oct 2018 – Jun 2019  
Software Developer

- Developed Selenium service to scrape websites and then store and analyze scraped data in Django.

**Northeastern Khoury College**, Boston, MA Jan 2020 – Present  
Algorithms TA

## 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 Computing