

EMPLOYMENT

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|---|-----------------------------|
| Amazon Robotics (Path Planning Team) | Westborough, MA |
| Software Development Engineer | September 2019 – April 2022 |
| <ul style="list-style-type: none">> Developed unstructured path planning API for autonomous warehouse vehicles> Implemented real-time event stream processor for vehicle allocation> Designed internal alarming library used across adjacent teams> Developed optimizations across data pipeline to improve scaling of accessor API by 1500%> Simplified management of throttling system and collaborated on clear self-service workflow for clients> Presented technical design decisions and service deep-dive> Took on occasional UI design work> Mentored intern project and positively influenced programming methodology of colleagues | |
| MathWorks (Data Tools & Graphics Teams) | Natick, MA |
| Software Engineering Intern | Summer 2018 |
| > Developed full-stack feature and other enhancements for MATLAB Online | Summer 2017 |
| > Implemented several interactive UI widgets for MATLAB's property inspector | Summer 2016 |
| > Produced graphics performance reporting app which enabled team to track progress | |
| Meadowbrook Day Camp | Weston, MA |
| Senior Counselor, Junior Counselor | Summers 2013–2015, 2019 |

EDUCATION

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|---|---------------------------|
| University of Massachusetts, Amherst | 3.91/4.0 |
| <i>Bachelor of Science in Computer Science</i> | September 2015 – May 2019 |
| 589 Machine Learning 583 Game Programming 403 Robotics 611 Advanced Algorithms | |
| 514 Data Science 383 Artificial Intelligence 326 Web Programming MA MvCalc / LinAlg / DiffEq | |
| University of Auckland | 8.25/8.0 |
| <i>Semester Abroad</i> | Spring 2018 |
| 373 Computer Graphics 351 Database Systems 345 Human-Computer Interaction | |

ACTIVITIES & SKILLS

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| Wordle Solver & Solver Leaderboard (freshman.dev/wordle) | 2022 |
| <ul style="list-style-type: none">> Published interactive Wordle solver and primary leaderboard for non-interactive approaches> Over 300 submissions with 17 optimal solutions and 50k views | |
| Multiplayer Word Game (wordbase.app) | 2021 |
| <ul style="list-style-type: none">> Remade discontinued word game in MERN stack | |
| Independent Study on ReactJS | 2019 |
| <ul style="list-style-type: none">> Researched MERN stack to produce materials for web development course | |
| Hierarchical Control System for Simulated Pong-Playing Robot | 2019 |
| <ul style="list-style-type: none">> Composed behavior from low-level PD controllers to integrated gameplay for course competition | |
| Hackathon Competition | 2018 |
| <ul style="list-style-type: none">> Won 'Most Innovative' for web app which crowdsourced reference discovery process for research questions> Collaborated with a group of international students while studying at the University of Auckland | |
| Team Lead – Competitive Programming Interest Group | 2017 |
| <ul style="list-style-type: none">> Achieved 7th place in the ICPC 2017 Northeast North America Regional Contest | |
| Secretary – Association for Computing Machinery (ACM) Student Chapter | 2017 |
| <ul style="list-style-type: none">> Planned monthly events including networking, coding competitions, and company tours | |

Languages, Frameworks, Technologies & Methodologies

- > Java, JavaScript/TypeScript, Python, C#, C, HTML/CSS, MATLAB, SQL
- > MERN stack (MongoDB, ExpressJS, ReactJS, NodeJS), Django
- > AWS, Chromium DevTools, Git, Unix shell, REST APIs, Service-Oriented Architecture, Agile development