

EMPLOYMENT

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<b>Amazon Robotics</b> Path Planning Team	Westborough, MA
Software Development Engineer	September 2019 – April 2022
<ul style="list-style-type: none"><li>&gt; Developed unstructured path planning API for autonomous warehouse vehicles <a href="#">demo</a></li><li>&gt; Implemented real-time event stream processor for vehicle allocation</li><li>&gt; Developed optimizations across data pipeline to improve scaling of accessor API by 1500%</li><li>&gt; Designed internal alarming library used across adjacent teams</li><li>&gt; Simplified management of throttling system and collaborated on clear self-service workflow for clients</li><li>&gt; Presented technical design decisions</li><li>&gt; Took on occasional UI design work</li><li>&gt; Mentored intern project and positively influenced programming methodology of colleagues</li></ul>	
<b>MathWorks</b> Data Tools & Graphics Teams	Natick, MA
Software Engineering Intern	Summer
> Developed full-stack feature for MATLAB Online's Import Tool	2018
> Implemented several heavy UI elements for MATLAB's property inspector	2017
> Created graphics performance report to enable progress tracking for team	2016

EDUCATION

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<b>University of Massachusetts, Amherst</b>	4\ <b>3.91</b>
Bachelor of Science in Computer Science	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	
<b>University of Auckland</b>	8\ <b>8.25</b>
373 Computer Graphics    351 Database Systems    345 Human-Computer Interaction	Spring 2018

OTHER

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<b>MERN-based Web Apps</b>	2021 – 2023
<ul style="list-style-type: none"><li>&gt; <a href="#">wordbase.app</a> remake of discontinued multiplayer word game</li><li>&gt; <a href="#">wordle.freshman.dev</a> leaderboard for Wordle bots</li><li>&gt; <a href="#">dinder.social</a> match users based on what they'd like to make for dinner</li><li>&gt; <a href="#">pico.freshman.dev</a> resources for getting started with the Raspberry Pi Pico</li><li>&gt; <a href="#">follow-sync.freshman.dev</a> sync follows between Twitter and Mastodon</li></ul>	
<b>Independent Study on ReactJS</b>	2019
> Produced materials on MERN stack for web development course	
<b>Hierarchical Control System for Simulated Pong-Playing Robot</b>	2019
> Composed behavior from low-level PD controllers to integrated gameplay for course competition	
<b>Hackathon Competition</b>	2018
> Won 'Most Innovative' for crowdsourced reference discovery process, at University of Auckland	
<b>Team Lead – Competitive Programming Interest Group</b>	2017
> Achieved 7th place in the ICPC 2017 Northeast North America Regional Contest	
<b>Secretary – Association for Computing Machinery (ACM) Student Chapter</b>	2017
> Planned monthly events including networking, coding competitions, and company tours	
<b>Languages, Frameworks, Technologies &amp; Methodologies</b>	
<ul style="list-style-type: none"><li>&gt; Java, JavaScript/TypeScript, Python, HTML/CSS, C/C++, C#, Kotlin, Ruby, MATLAB, SQL</li><li>&gt; MERN stack (MongoDB, ExpressJS, ReactJS, NodeJS), Django, Dojo Toolkit</li><li>&gt; AWS, Chromium DevTools, Git, Unix shell, REST APIs, Service-Oriented Architecture, Agile</li></ul>	