

EMPLOYMENT

- Amazon Robotics** (Path Planning Team) Westborough, MA
Software Development Engineer September 2019 – April 2022
- > Developed unstructured path planning API for autonomous warehouse vehicles (demo ↗)
 - > 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
- > Developed full-stack feature and other enhancements for MATLAB Online Summer 2018
 - > Implemented several interactive UI widgets for MATLAB's property inspector Summer 2017
 - > Produced graphics performance reporting app which enabled team to track progress Summer 2016
- Meadowbrook Day Camp** Weston, MA
Senior Counselor, Junior Counselor Summers 2013–2015, 2019

EDUCATION

- University of Massachusetts, Amherst** 3.91/4.0
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 |
- University of Auckland** 8.25/8.0
Semester Abroad Spring 2018
- | | | |
|-----------------------|----------------------|--------------------------------|
| 373 Computer Graphics | 351 Database Systems | 345 Human-Computer Interaction |
|-----------------------|----------------------|--------------------------------|

ACTIVITIES & SKILLS

- Dinder** (dinder.freshman.dev) 2023
- > Published web app which matches users based on what they'd like to make for dinner
- Wordle Solver & Solver Leaderboard** (freshman.dev/wordle) 2022
- > Published interactive Wordle solver and primary leaderboard for non-interactive approaches
 - > Over 300 submissions with 18 unique optimal solutions and 50k views
- wordbase.app** (wordbase.app) 2021
- > Remade discontinued multiplayer word game
- Independent Study on ReactJS** 2019
- > Researched MERN stack to produce materials for web development course
- Hierarchical Control System for Simulated Pong-Playing Robot** 2019
- > Composed behavior from low-level PD controllers to integrated gameplay for course competition
- Hackathon Competition** 2018
- > 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
- > Achieved 7th place in the ICPC 2017 Northeast North America Regional Contest
- Secretary – Association for Computing Machinery (ACM) Student Chapter** 2017
- > Planned monthly events including networking, coding competitions, and company tours
- Languages, Frameworks, Technologies & Methodologies**
- > Java, JavaScript/TypeScript, Python, HTML/CSS, C/C++, C#, Kotlin, Ruby, MATLAB, SQL
 - > MERN stack (MongoDB, ExpressJS, ReactJS, NodeJS), Django, Dojo Toolkit
 - > AWS, Chromium DevTools, Git, Unix shell, REST APIs, Service-Oriented Architecture, Agile development