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
  Optimized tier-1 data pipeline service ecosystem to improve scaling of accessor API by 1500%
  Designed internal alarming library used across adjacent teams
  Simplified management of throttling system and collaborated on clear self-service workflow for
  clients
  Presented technical design decisions
  Undertook occasional UI design work
  Mentored intern project and positively influenced programming methodology of colleagues
  Quit after unprofessional behavior from coworkers

MATHWORKS · DATA TOOLS & GRAPHICS TEAMS · NATICK, MA
Software Engineering Intern   **SUMMERS 2016–2018**
  Developed full-stack feature for MATLAB Online's Import Tool
  Implemented several heavy UI elements for MATLAB's Property Inspector, including colormap (detail)
  Created graphics performance reporting app for progress tracking

UNIVERSITY OF MASSACHUSETTS, AMHERST · AMHERST, MA   4.0\ **3.91**
Bachelor of Science in Computer Science   **SEPTEMBER 2015–MAY 2019**
  589 Machine Learning 514 Data Science 583 Game Programming 383 Artificial Intelligence
  403 Robotics 326 Web Programming 611 Advanced Algorithms MATH MVCalc LinAlg DiffEq

UNIVERSITY OF AUCKLAND · AUCKLAND, NEW ZEALAND   8.0\ **8.25**
Semester Abroad   **SPRING 2018**
  373 Computer Graphics 351 Database Systems 345 Human-Computer Interaction

OTHER PROJECTS & ROLES
MERN-based Web Applications   **2021–2023**
  (wordbase.app) remake of discontinued multiplayer word game
  (wordle.freshman.dev) leaderboard for programmatic Wordle solvers
  (dinder.social) make new recipes with random people on the internet
  (pico.cafe) resources for getting started with the Raspberry Pi Pico
  (follow-sync.freshman.dev) sync follows between Twitter and Mastodon
  (basin.fish) fishbowl, a party game similar to charades
Hierarchical Control System for Simulated Pong-Playing Robot   **2019**
  Composed behavior from low-level PD controllers to integrated gameplay for course competition
3D Game Development in Unity   **2019**
  Designed physics-based couch game with Nintendo Joy-Cons for player input (link)
Hackathon Competition 2018   **2018**
  Won 'Most Innovative' for idea with random group while studying at University of Auckland
Team Lead, Competitive Programming Interest Group   **2017**
  Achieved 7th place in the ICPC 2017 Northeast North America Regional Contest (scoreboard)
  Qualified at BOSPRE Preliminary as first-time ICPC competitor (scoreboard)
Secretary, Association for Computing Machinery (ACM) Student Chapter   **2017**

PROGRAMMING LANGUAGES, FRAMEWORKS, TECHNOLOGIES & METHODOLOGIES
  Java, JavaScript/TypeScript, Python, C/C++, C#, Kotlin, Ruby, MATLAB, HTML/CSS, SQL
  MERN stack (MongoDB, ExpressJS, ReactJS, NodeJS), Django, Dojo Toolkit
  AWS, Chromium DevTools, Git, Unix shell, REST APIs, Service-Oriented Architecture, Agile

CYRUS FRESHMAN · BOSTON, MA · CYRUS@(FRESHMAN.DEV)