

Education

- **University of Massachusetts** Amherst, MA
M.S. Computer Science (3.97) 09/2018 - 02/2021
- **University of Saint Thomas** Saint Paul, MN
B.A. Computer Science (4.00) & B.A. Applied Mathematics (3.75) 09/2010 - 05/2015
 - Magna Cum Laude graduate with a cumulative GPA of 3.89.

Experience

- **Staff Engineer at IBM (May 2021 - Present)**
- **Graduate Teaching Assistant (Fall 2020)** Led instruction of one of the three weekly course meetings for the large undergraduate Web Programming course. Assisted in the development of programming exercises and assignments that explored web technologies.
- **Graduate Intern at Nokia Bell Labs (June 2020 - August 2020)** Member of the group researching the orchestration of teams of heterogeneous autonomous robots, which are often present in a factory or warehouse setting. Designed a finite-state machine for the centralized orchestrator to foresee and prevent potential collisions of robots. Implemented the design in Go, utilizing simulation software.
- **Graduate Research Assistant (September 2018 - May 2020)** Collaborator of the research lab studying programming languages and compilers. Worked toward examining the effectiveness of a strict JavaScript subset to enhance development, particularly among beginners. This subset is constructed via source-to-source JavaScript compilation, which performs static checks and inserts dynamic checks for runtime. The transpiler is actively used each semester in the undergraduate Programming Methodology course.
 - AAAI Conference Publication: <https://doi.org/10.1609/aaai.v34i09.7065>
 - GitHub Code Repositories: [ocelot-ide/ElementaryJS](#), [ut-amrl/robo-js](#)
- **Software Engineer II at Veritas Technologies (June 2017 - August 2018)** Continued responsibilities as a recognized subject-matter expert concerning technicalities of our web client. Co-lead the front-end community of practice, a cross-site collaborative development group. Transitioned to application middleware development on CloudPointTM; multi-cloud data management software which sought to aggregate control of heterogeneous public cloud environments. Worked to assist in the restructure of the API gateway in Node.js, for consumption by customers and improved scalability.
- **Software Engineer I at Symantec Corporation/Veritas Technologies (June 2015 - May 2017)** Front-end JavaScript developer on Veritas VelocityTM, a distributed copy data management application. Velocity sought to streamline control of Oracle snapshots; allowing database administrators convenient automation and application developers the ability of self-service. Responsible for integrating with back-end web services on features such as role-based access control and point-in-time scheduling configuration, in order to deliver a robust interface for customers.

Skills

- **Languages/Frameworks:** JavaScript/TypeScript, AngularJS, Express.js, Jasmine, Jest, Protractor, Restify, Go, Java, HTML, CSS, L^AT_EX
- **Environments/Tools:** Babel.js, Bash, Firefox, Git, GitHub Actions, GNU parallel, JSHint/ESLint, Node.js/npm/npx, Slack, Swagger, tmux, Travis CI, Unix (Ubuntu/macOS)
- **Concepts/Protocols:** Protocol Buffers, CI/CD, DOM, HTTP, JSON, OOP, REST, TDD, WS