

# NATHAN WHITCOME

Chicago, Illinois

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## Masters level senior software engineer with 3+ years of professional experience

Software engineer with three years of professional experience specializing in object-oriented programming, full-stack software development, and computer communication algorithms. Seeking a senior position to apply my leadership and software development skills. Strong with interpersonal communication.

## TECHNICAL SKILLS

**Languages** Java, Python, C, JavaScript, SQL, Elixir  
**Web Technologies** HTML, CSS, Angular, Vue.js, React, Node.js, Spring

## PROFESSIONAL EXPERIENCE

**Software Engineer, Motorola Solutions, Chicago, IL** 2022 - 2024

- Developed and tested back-end communication systems for flagship next-generation radios used by customers worldwide in emergency situations with Java, Python, Microsoft Azure, Kubernetes, and Docker.
- Worked in small teams following Agile principles within two-week sprints while keeping proper version control using Git.
- Built services for communicating with environmental sensors and displaying information to customers using Angular and Spring.
- Ensure code quality control through a pipeline testing system using GitHub Actions and local testing with frameworks such as Mockito and Junit.

**Teaching / Graduate Research Assistant, Iowa State University, Ames, IA** 2020 - 2021

- Hosted labs and office hours for Computer Networking and Embedded Systems Programming classes.
- Collaborated with a team on the ARA project, focusing on researching use of software defined networking for developing the first advanced wireless testbed for agricultural purposes.
- Attended weekly research meetings and gave presentations on relevant academic papers.

**Software Engineering Intern, Power Electronics International, East Dundee, IL** 2018 - 2020

- Orchestrated and coded a project to develop a customer-facing data collection and analysis system using HTML, CSS, JavaScript, Vue.js, Node.js, and PostgreSQL.
- Designed and developed internal data management tools using Python and SQL.

## EDUCATION

**Masters of Engineering (ME) - Computer Engineering** 2020 - 2021

Iowa State University

Advanced wireless communication focus area.

**Bachelors of Science (BS) - Computer Engineering** 2016 - 2020

Iowa State University

## PERSONAL PROJECTS

### Ableton Live MIDI DAW Controller

- Designed custom circuit and wrote software to control motorized potentiometers and handle input from mechanical keys into Arduinos.
- Wrote custom specification and back end API for efficient communication between Ableton Live and Arduino boards using C and Python.