

# Austin Rognes

Active Secret Security Clearance

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## EDUCATION

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### Iowa State University B.S. Software Engineering, December 2022

- Minor in Cyber Security.
- GPA: 3.31

## WORK EXPERIENCE

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### Northrop Grumman, San Antonio, TX: Associate Embedded Software Engineer

January 2023 - Present

- Gained a conceptual understanding of synchronous and asynchronous camera intricacies from domain experts.
- Refactored an unclassified asynchronous LADAR tracking system to also handle synchronous camera input.
- Leveraged Matlab to convert camera frames between FPGA output formats.
- Setup GoogleTest for unit testing and built a separate C++ application for end to end testing.

### Hy-Vee, Grimes, IA: Software Engineering Intern

May 2022 - December 2022

- Pair programmed to add Novavax vaccination to the pharmacy website and server.
- Explored full-stack development with C#, React, TypeScript and Apollo GraphQL.
- Collaborated on sending vaccination data to a healthcare company API, reducing faxing costs by over 90%.
- Identified and resolved an application wide bug by extending the built in JavaScript Date object to mirror MomentJS.
- Ensured WCAG 2.1 compliance was upheld on every vaccination form page.
- Implemented activation toggles for new COVID vaccines for safe and incremental releases.
- Deepened my understanding of Git, testing ideologies, and Agile methodology.

### Iowa National Guard: Sergeant/E5

February 2017 - Present

- 12 month deployment overseas as an air defense battle management system operator.
- Integrated into 3 different teams for 3 months each during deployment.
- Operated, maintained, and trained other soldiers on air defense systems.
- Worked with people of many vastly different cultures and belief systems from all over the world.

## PROJECTS

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### Collins Aerospace: Simultaneous Call Transmission

January 2022 - December 2022

- Created an ML model that detects multiple concurrent radio transmissions with 4 other teammates.
- Collaborated with 3 electrical engineers to simulate isolated and interfering aircraft radio transmissions.
- Setup CI/CD to generate new training data every time radio simulation was modified.

### Keyboard

April 2022 - August 2022

- Designed and manufactured a split, ergonomic, 42 key, bluetooth keyboard pcb using KiCad.

### Affordable Housing

March 2017 - April 2017

- Designed an affordable house that was built in Des Moines, IA using Autodesk Revit for the [Polk County Housing Trust Fund](#).

## SKILLS

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### Programming Languages

- Highly Skilled in JavaScript, TypeScript, Python, C and C++.
- Fluent in SQL and NoSQL languages, C#, .NET, PowerShell, HTML/CSS, Java and VHDL.

### Tools and Frameworks

- Highly Skilled in Git and Object Oriented Programming.
- Experience with Linux, React, Sveltekit, Firebase, GraphQL, Vim, Jira and plenty more.

### Certifications

- [CS50x online Harvard class](#): Introduction to Computer Science 2020.

## ACTIVITIES AND CLUBS

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- Made open source contributions and built small projects in 24-48 hour hackathons with the ISU Hackathon Club.
- Played capture the flag on green team three times with the Information Assurance Club.
- Competed in the MIT Battlecode 2020 competition with the ISU AI Club.
- COMS 309 Fall 2021: Top programmer of the semester award.
- Ran the 2019 Boston Marathon in 2:51.20. Placed 1203 out of 27360 total runners