

Daniel Hawker

dhawk064@gmail.com ❖ (608) 852-2801 ❖ Minneapolis, MN ❖ [linkedin.com/in/daniel-hawker](https://www.linkedin.com/in/daniel-hawker)

EDUCATION

University of Minnesota (College of Science and Engineering)

September 2022 – Present (May 2025)

B.S. Computer Science, Mathematics Minor

Minneapolis, MN

- 3.941 GPA / CSE Dean's List

EXPERIENCE

Graco

May 2024 - Present

Software Engineering Intern

Minneapolis, MN

- Worked on the software development team of ProMix V, Graco's upcoming flagship proportioning system.
- Developed, tested, refactored, and bug fixed code written in C and Structured Text to help Graco meet their product deadlines and release dates.
- Practiced agile development with a Minneapolis team and an offshore team in India through Jira. Regular standups, sprints, retrospectives, and releases.
- Reviewed and refined code and pull requests from offshore teams using Git and BitBucket.
- Learned how to develop software and work professionally under management with high expectations.

PROJECTS

github.com/hawkerd

ProMix V (Graco) - 2024

- Developed and debugged complex state machine logic in Structured Text to handle I/O in C for meters, solenoids, and other hardware. Used an object oriented design to reduce coupling and allow code reuse.
- Designed and developed a GUI/HMI system as well as ensured compatibility with PLC controllers to allow both human factory operators and automated systems to control the machine.
- Refactored large sections of code like the proportioning sequence and the purging sequence into libraries for use in other Graco projects by eliminating unnecessary dependencies and simplifying logic.
- Tested code on three different prototype machines rigorously in collaboration with the hardware team.
- Added, fixed, and tested functionality throughout sprints for each release.

Drone Simulation (University of Minnesota)

hub.docker.com/repository/docker/hawkerd/drone_simulation_final

- Built an advanced model to simulate a drone delivery system around the University of Minnesota.
- Integrated backend C++ logic with frontend HTML, CSS, and TypeScript using JSON.
- Used design patterns like Builder, Decorator, and Abstract Factory to improve and add functionality.
- Worked on a team with three other students, using Jira for project management and Git for version control.

Sorting algorithm visualizer

github.com/hawkerd/visualizer

- Written in **C++** and uses **OpenGL** for rendering through libraries including GLFW and GLEW.
- Maintains a client-side database system using **SQLite** to store user preferences.
- Required a deep understanding of the algorithms used, which was a great learning experience.

SKILLS

- Languages: C, Python, C++, Java, Structured Text, OCaml, x86 Assembly
- Practices: **Agile**, OOP, embedded development, functional programming, software testing
- Software: Atlassian Suite(Jira, BitBucket), GitHub, Microsoft Office, MatLab, Mathematica, R
- Tools: **Git**, Linux, Docker, GDB, Valgrind, UML
- Problem solving: **algorithms**, **data structures**, design patterns, calculus, **linear algebra**, statistics
- Personal skills: collaboration, time management, organization, communication