DALTON LUCE

Boston, MA   [LinkedIn](#)   [GitHub](#)   [daltonluce.com](#)

EDUCATION

Cornell University
Ithaca, NY

Bachelor of Science in Electrical and Computer Engineering, Minor in CS · *Expected Spring 2026*

- 4.028 GPA, Dean's List all semesters
- James E. Rice Jr. First Year Writing Seminar Award Nominee
- **Leadership:** Autobike Project Team Software Lead, IEEE at Cornell Executive Board, Cornell Outdoor Eduction Student Athletic Instructor, Cornell Club Swim Vice President
- **Relevant coursework:** Embedded Systems, Functional Programming, OOP and Data Structures, Digital Logic and Computer Organization, Data Science, Differential Equations, Linear Algebra

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EXPERIENCE

Raytheon
Woburn & Marlborough, MA

Software Engineer, Intern · *Jun–Aug 2024*

- Developed Perl tooling with Git and Docker to drive DevSecOps pipeline migration to GitLab, Jira, supporting over 1,000 developers
- Built NTP (Network Time Protocol) monitoring script to detect timing discrepancies across 300+ Linux systems
- Jira admin: Groovy scripting with ScriptRunner and Jira API to implement custom validations and checks across key workflow stages
- Validated C++ code pull requests for naval radar product branch by investigating automated test suite failures and radar simulations
- Utilized Grafana to analyze server downtime and resource allocation trends to inform data-driven improvements in the DevOps pipeline
- Jenkins admin: updated and debugged CI/CD pipelines for infrastructure stability, code validation, deployments, and resource scaling

Software Engineer, Intern · *Jun–Aug 2023*

- Enhanced system diagnostics of X-Band Radar software (1M+ lines of code) by resolving low-level messaging and queuing issues
- Gained proficiency in Ada, ClearCase version control, and Jenkins to correct radar functionality, validate using radar simulations
- Assisted in redeveloping a tool to simulate external messages and test radar capabilities
- Collaborated across teams of system engineers, validation teams, and software developers to align functionality with system requirements
- Participated in code reviews, sprint planning, and backlog refinement

Cornell Autonomous Bicycle Project Team
Ithaca, NY

Software Lead · *May 2024–Present*

- Define technical goals and allocate tasks for team of eight
- Onboard and mentor new team members, providing training on project architecture and tools
- Collaborate with cross-functional teams, including hardware and mechanical subteams, to define data formats and integrate software
- Define team Docker and ROS infrastructure, streamlining development and integration with kinematic, optical, and LiDAR sensors
- Automate CI/CD pipelines to test, format, and execute code using GitHub Actions

Navigation Developer · *Aug 2022–May 2024*

- Contributed to repository with 25K+ lines of source code
- Implemented optical flow and computer vision techniques to predict vehicle and pedestrian motion using OpenCV
- Developed bicycle dynamics algorithims using NumPy to significantly reduce path finding search space
- Collaborated with team of 10 to create Q-Learning collision avoidance algorithm

Tholyl Technologies
Acton, MA

Software Tester, Intern · *Oct 2021–Aug 2022*

- Tested an Angular full stack job board application for local students
- Reported bugs, provided insight into development of software product
- Created and managed startup website

SELECTED ENGINEERING PROGRAMS

Hajim School of Engineering & Applied Sciences Pre-College Intensive
Summer 2021

University of Rochester · *Virtual*

- Attended highly selective 20-student cohort three-week intensive studies program completing modules in electrical and computer engineering, data science, and biomedical engineering

Luddy Pre-College Summer Computing & Engineering Summer Program
Summer 2021

Indiana University, Luddy School of Informatics · *Virtual*

- Attended a week-long pre-college exploratory program that covered topics such as intelligent sound-processing, microbiome gene sequencing, 3D modeling

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TECHNICAL SKILLS

- **Languages**: Python, C, C++, Java, Groovy, Perl, OCaml, Ada, JavaScript/HTML/CSS, Bash
- **Frameworks**: ROS, Svelte
- **Developer Tools**: Git, Docker, Jenkins, Grafana, ClearCase, GitHub Actions, GitLab CI/CD