Dalton Luce

Boston, MA LinkedIn GitHub daltonluce.com

EDUCATION

Cornell University Expected 2026

Bachelor of Science in Electrical and Computer Engineering, CS minor

Ithaca, NY

- 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 Education Student Athletic Instructor, Cornell Club Swim Vice President
- Relevant coursework: Differential Equations, Linear Algebra, Functional Programming; OOP and Data Structures, Data Science, Digital Logic and Computer Organization, Embedded Systems

EXPERIENCE

RTX Woburn & Marlborough, MA

Software Engineer, Intern

Summer 2024

- Developed Perl tooling with Git and Docker to drive DevSecOps pipeline migration to GitLab, Jira, supporting over 1,000 developers
- Built custom NTP (Network Time Protocol) monitoring script to detect and flag timing discrepancies across hundreds of RHEL systems with diverse configurations
- Validated C++ code pull requests for naval radar product branch by investigating automated test suite failures and radar simulations
- Analyzed server usage, downtime, and resource allocation trends using Grafana to inform data-driven improvements in the DevOps pipeline
- Jira admin: created and configured projects for software teams, leveraged Groovy scripting to automate project processes
- Jenkins admin: updated and debugged CI/CD pipelines for infrastructure stability, code validation, deployments, and resource scaling

Software Engineer, Intern

Summer 2023

- Improved detection accuracy of X-Band Radar software (1,000,000+ lines of code) by addressing priority issues and running end-to-end radar simulations
- Gained proficiency in Ada, ClearCase version control, and Jenkins to address and correct low-level radar functionality
- Assisted in redeveloping a tool to simulate external messages and test radar capabilities
- Collaborated closely across teams of system engineers, validation teams, and software developers to align software functionality with system requirements
- Participated in code reviews, sprint planning and backlog refinement

Cornell Autonomous Bicycle Project Team

Ithaca, NY

Software Subteam Lead

Summer~2024-Present

- Define technical goals and allocate tasks for team of 8
- 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

Fall 2022—Spring 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 algorithms using NumPy to significantly reduce path finding search space
- Worked with team of 10 to create Q-Learning collision avoidance algorithms

Tholyl Technologies Acton, MA

Software Tester, Intern

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

Indiana University, Luddy School of Informatics

Hajim School of Engineering & Applied Sciences Pre-College Intensive University of Rochester

 $Summer\ 2021$

Virtual

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

Luddy Pre-College Summer Computing & Engineering Summer Program

 $Summer\ 2021$

Virtual

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

TECHNICAL SKILLS

- $\bullet \ \mathbf{Languages} \text{: Python, C, C++, Java, Groovy, OCaml, ADA, JavaScript/HTML/CSS, Bash} \\$
- Frameworks: ROS, Svelte
- Developer Tools: Git, Docker, Jenkins, Grafana, ClearCase, GitHub Actions, GitLab CI/CD