# 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
- Tau Beta Pi Engineering Honor Society, 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

#### 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 algorithms 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
- $\bullet$  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

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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 Indiana University, Luddy School of Informatics

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

University of Rochester

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