Matthew M. Ruby

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Security Clearance: Interim Secret (Granted May 2026)

EDUCATION

Virginia Tech **Expected: May 2028**

Blacksburg, VA — B.S. Mechanical Engineering, Minor in Computer Science

- GPA: 3.85/4.0
- Relevant Coursework: Statics, Dynamics, Thermodynamics, Fluid Dynamics, Mechanics of Deformable Bodies, Mechanical Vibrations, Differential Equations, Linear Algebra, Multivariable Calculus, Materials Science

Thomas Jefferson High School for Science and Technology **Sept 2020 - June 2024**

Alexandria, VA — Advanced Studies Diploma

- Weighted GPA: 4.38/4.0 | Unweighted GPA: 3.9/4.0

WORK EXPERIENCE

Engineering Intern, Cardinal Engineering LLC — Structures & Survivability Branch **June 2026 - Aug 2026**

Washington, DC — Engineering Consultant

- Assisted with structural analysis of in-service Naval nuclear submarines, supporting NAVSEA and Electric Boat (EB)
- Supported all classes of submarines, including the Columbia, Virginia, Ohio, Los Angeles, and Seawolf classes
- Worked on Unrestricted Operation Maintenance Requirement Cards (URO MRCs) to ensure ship structural integrity
- Analyzed submarine engineering drawings, tracking joints for inspection in URO MRCs
- Developed a custom calculator to compute fillet weld sizing for submarine welds
- Trained in shock equipment qualification and additive manufacturing
- Utilized Liaison Action Requests (LARs) to track changes in submarine design

PROJECTS

Founder & Full-Stack Developer, Whop Community Meetings **May 2025 - Present**

Web Application | 3,000+ installs and users

- Developed and launched a Zoom-integrated web app for Whop, a digital marketplace for creators and communities
- Worked across the full stack — frontend (React), backend (Node.js), and database (PostgreSQL) — to implement Zoom OAuth, API meeting management, and role-based meeting access
- Published on Whop app store, achieving 3,000+ installs and active users

ACTIVITIES

Vice President, Co-Founder, Structures Team Lead **Oct 2025 - Present**

Humanoid Robotics Club, Virginia Tech

- Co-founder of a humanoid robotics club, working to develop a walking legs prototype for a humanoid robot
- Structures lead designing the robot components, coordinated lab space, weekly meetings, organized subteams

Member, e-NABLE Charitable Design Club Statics Team **Sept 2025 - Present**

Virginia Tech

- Member of the statics subteam, helping to design sports equipment attachments using computer-aided design (CAD)

First-Year Leadership Experience (FLEX) **Oct 2024 - May 2025**

Virginia Tech

- Active participant in year-long program designed to help first-year students develop self-understanding, leadership, and involvement at Virginia Tech

SKILLS

Skills: Computer-Aided Design (CAD), Microsoft Office, Google Suite, AWS Cloud Practitioner (in progress)

Programming Skills: Java, Python, JavaScript, Android Studio, MATLAB, SQL, PostgreSQL, React, HTML, CSS, Wix