# Carson G. Russo

crusso25@vt.edu | (704)-654-2029 | LinkedIn: linkedin.com/in/carson-russo-454302235 | GitHub: crusso25 | Active Interim Secret Security Clearance

## **EDUCATION**

#### **Virginia Polytechnic Institute and State University**

Blacksburg, Virginia

B.S. in Computer Science and B.S in Applied Discrete Mathematics

Expected Graduation, May 2026

- o Concentrations: Software Engineering and Applied Mathematics
- o GPA: 3.48/4.00
- o Computer Science In-Major GPA: 3.6/4.00
- **o** Related Coursework: Algorithm Analysis, Cryptography, Data Structures & Algorithms, Operating Systems, Computer Organization, Combinatorics, Object-Oriented Programming

# **EXPERIENCE**

# **Diary Study Web Platform**

Blacksburg, Virginia

Aug 2024 – Present

Undergraduate Research Assistant

- Developing an interactive web platform for diary-based learning, enhancing human-computer interaction education through software matching, diary analysis, and intelligent template generation
- Implementing a full-stack web platform using ReactJS, SQL/NoSQL, and applying AI topic modeling techniques for data-driven insights
- Collaborating with a multidisciplinary team to explore design alternatives and deliver written and oral presentations

## **Northrop Grumman**

Baltimore, Maryland

Software Engineer Intern

Jun 2024 – Aug 2024

- Utilized **Python** Libraries (Plotly, pandas) and implemented parallelization to optimize software, reducing runtime from **35 hours to 1 hour**, significantly improving efficiency and productivity
- Designed a dashboard using **Plotly Dash** to display experimental data in a user-friendly manner, enhancing data accessibility and visualization for end-users
- Implemented a **Jenkins** pipeline to provide CI/CD, streamlining deployment and improving future development workflows

# **PROJECTS**

## **AI Study Assistant**

ReactJS | Spring Boot | PostgreSQL

Full Stack Web Application | studymaster.io

Jun 2024 – Present

- Developed an Al-powered study platform that creates personalized study guides and practice problems, currently
  used by students across over five universities to enhance exam preparation with targeted learning materials
- Designed the front end using ReactJS, and implemented a backend system with Spring Boot to create a RESTful API
  that manages user accounts with JWT authentication and email verification
- Utilized a **PostgreSQL database** and deployed the application on an **EC2** instance, achieving a scalable infrastructure that supports efficient data storage and access for users

#### **Stock Market Predictor**

ReactJS | Python | Flask

Full Stack Web Application | WEBSITE URL

Aug 2024 – Present

 Developing a stock market prediction web application using a React frontend and Flask backend, incorporating data scraping with pandas and machine learning models with scikit-learn to predict daily stock price movements

## **ACTIVITIES AND LEADERSHIP**

## **Brazilian Jiu Jitsu Instructor**

Blacksburg, Virginia

Mixed Martial Arts Club at Virginia Tech

Feb 2024 - Present

Instructed Brazilian Jiu Jitsu and self defense classes for the Mixed Martial Arts Club at Virginia Tech

## **SKILLS**

Languages: Python, Java, JavaScript, HTML/CSS, SQL, C

**Developer Tools**: AWS, Postman, Git, Bit Bucket, Jira, Jenkins, VMware **Libraries/Frameworks**: Spring Boot, PostgreSQL, ReactJS, Bootstrap, NodeJS