# **PRATHAM SAURABH**

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# **EDUCATION**

#### Georgia Institute of Technology

B.S. Computer Science

GPA: 3.7 Graduation: May 2027

Marietta, GA

- **Relevant Coursework**: Computer Organization and Programming, Data Structures & Algorithms, Objects and Design, Linear Algebra, Discrete Mathematics, Introduction to Object Oriented Programming, and Integral Calculus
- Languages: Java (Junit, Apache), Python (numpy, pandas), JavaScript, LC3 Assembly, SQL, ADA, HTML, CSS, C++, C, C#
- Software: CircuitSim, Docker, LC3Tools, SonarQube, AWS EC2, CodePeer, APKtools, Git, GeNN, MySQL, Pytest
- Clubs: Georgia Tech IOS club Bootcamp, Create X, Ivan Allen Student Advisory Board, Vertically Integrated Projects

## **PROFESSIONAL EXPERIENCE**

#### **Lockheed Martin**

Software En	gineering Intern (AMMM Cyber Security)	June 2025 – Present
•	Developed an automated model to systematically analyze codebases, mitigating companywide risks and vulnerabilities by 40%	
•	Released a comprehensive Software Assurance Plan defining security standard across Lockheed's aerospace program	
•	Implemented DISA STIGS framework and conducted security testing, ensuring DoD Cyber Security standard adherence	
•	Collaborated with cross-functional teams to perform code reviews and compliance	audits, identifying and remediating risks
Cyber Softw	are Engineering Intern (AMMM Cyber Security)	May 2024 – August 2024
•	Created a Python automation model to parse CodePeer results, accelerating code review by 35% identifying 200+ inefficiencies	
•	Utilized NIST 800-53 and CNSS controls to refine security policies for 50+ aviation subsystems reducing audit gaps	
•	Refactored Ada based legacy models improving modularity and maintainability, reducing static analysis warnings by 30%	

- Collaborated with Avionics teams to integrate findings into C-130J maintenance, decreasing redundant review loops
- Led intern knowledge sessions, training over 40+ peers on secure coding techniques and vulnerability assessments

#### **Georgia Tech Vertically Integrated Projects**

Undergraduate Researcher (STEMcomm)

- Conducted research on Artificial Intelligence, data collection methods, and physics applications to advance STEM education
- Designed a data scraper to collect and analyze datasets for research, improving data accessibility and usability (Selenium)
- Developed a Physics GPT model to generator accurate and interactive physics explanations, enhancing educational resources
- Assisted in planning, promoting, and executing the Computer Science based events at the Atlanta Science Festival

#### University of Georgia Research

Undergraduate Researcher

- Developed robust security framework for mobile and IoT systems enhancing security using APK files firmware (APKtools)
- Created an automated model which would download multiple APK's from the internet and place into a google sheet (Selenium)
- Analyzed the structure of Arduino's PLC devices to undergo penetration testing to create a more robust model of security
- Created projects which automated over various devices using the Arduino device to ensure speed to everyday tasks

#### ZenFrenz

Data Intern

Remote

- June 2023 August 2023
- Presented data-driven insights to the CEO, resulting in 12% conversion increase pet wellness tailored via Shopify campaigns
- Identified purchase pattens from 5000+ customers data across Amazon FBA and Shopify, improving targeted precision
- Utilized the statistical decision tree model that boosted click rates through personalized product recommendations

## **PROJECTS**

#### PhysicsGPT

#### **STEMcomm**

- Built a transformer model to answer physics questions using a custom dataset of 60,000+, improving engagement and accuracy
- Designed and implemented data preprocessing pipelines to clean, structure, and optimized data for chatbot integration
- Leveraged NLP techniques to enhance response accuracy, ensuring reliable and detailed answers for complex physics queries

#### GeNN CI/CD Workflow Integration

INCF/GSOC 2025

- Designed and implemented six custom GitHub Action workflows to automate CI/CD testing for GeNN Neural Network framework
- Improved pull request stability through the addition of linting (clang-format) and unit-testing, reducing manual review by 40%
- Validated workflows on Ubuntu runners, debugging EC2 compatibility refactoring jobs for cross-platform deployment (AWS EC2)

## **ADDITIONAL**

Interests: Cooking, Hiking, Exploring, Basketball, Football, Tennis (Highest UTR 7), Gardening, DIY Builds, Hapkido Security Clearance: Interim Secret

Languages: English (Fluent), Hindi (Proficient in Speaking), Spanish (Intermediate in Speaking)

Atlanta, GA January 2025 – Present

Athens. GA

June 2022 – May 2024