

Tanmay Joshi

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Education

Georgia Institute of Technology | GPA 3.4 / 4.0 | Atlanta, GA

May 2026

Bachelor of Science in Computer Science (Cybersecurity & Artificial Intelligence)

Skills

Programming: Java, Python, JavaScript, C, C#, C++, SQL, CSS, Bash, Excel, Unix/Linux, PyTorch, Docker, React, Git, Jira, confluence

Technical: AWS, Agile Methodologies, OOP Principles, LLMs, ML, RESTful APIs, pytorch, ServiceNow, Computer Vision

Data & Analytics: Power BI, ETL Pipelines, Statistical Analysis, Applied Mathematics, Data Visualization, Predictive modeling

Security Concepts: SOC, Threat Detection, TCP/IP, Network Monitoring, Encryption Protocols, Authentication, Application Layer Security

Experience

Georgia Tech Research Institute | Atlanta, GA

July 2025 – Present

Product Manager

- Translated complex stakeholder requirements (FDA V&V) into a user-centric QA platform for 3D-printed medical implants, defining the product specifications for a high-precision analysis interface and critical data-export features.
- Identified a critical user pain point and workflow bottleneck in the V&V pipeline, driving the development of an automated reporting feature that slashed human error rates and measurably streamlined the data-to-submission process.
- Established and enforced critical software data security measures to maintain the integrity of dimensional analysis evidence

Georgia Tech Alumni Association | Atlanta, GA

June 2025 – Present

Data/Cyber Analyst

- Improved data accuracy by 20% across a 250,000+ record alumni database by designing and implementing new validation protocols leveraging ServiceNow to manage and resolve data integrity tickets, enhancing completeness for data collected from Microsoft ERP.
- Built automated ETL pipelines that ingested data from 4 sources, cutting manual prep time by 15% and enabling faster reporting.
- Guided strategic outreach campaigns by doing quantitative analysis and predictive models and generating data-driven reports using KPIs, translating complex financial data into actionable intelligence that contributed to a 30% increase in alumni engagement

National Science Foundation | Atlanta, GA

Jul 2024 – May 2025

Frontend Engineer

- Delivered a public, open-source software for nanoscale 3D printing by collaborating with a cross-functional team of four to architect and develop the tool for the research community on GitHub.
- Enhanced system performance by 50% by engineering an interactive MATLAB GUI to dynamically test and tune over 50 configurable parameters, boosting accuracy from 29% to 68% accuracy rate in preprocessing workflows.

Computational Behavior Analysis research Lab | Atlanta, GA

Aug 2024 – Jan 2025

AI/ML Intern

- Achieved 96% accuracy in classifying 12 human activities by implementing and training deep learning models for Human Activity Recognition (HAR) using multi-modal sensor data.
- Reduced pre-training data requirements by 20% by leveraging ML models such as PyTorch, minimizing the need for unlabeled data and improving model training efficiency.

Projects

Threat Response & Automation Platform | Full-Stack

- Reduced manual analysis time for security teams by 20% by architecting a full-stack web/mobile environment (Python, PostgreSQL, JS) that automated risk assessment for emails, URLs, and IPs.
- Improved incident response time by 17% by integrating the Google Gemini API to create an AI phishing simulator, which allowed the security team to identify critical employee vulnerabilities through 200+ simulations and return suggestions using NLP.
- Ensured scalable and consistent deployment for customer use by containerizing the entire application with Docker and deploying it to a cloud environment (Render/AWS).

Visual Authentication & Networked Tracking for Group Environments | Computer Vision

- Developed a facial recognition program using machine learning to automate attendance collection for over 400 Georgia Tech students.
- Engineered the system to process real-time video feeds with 95% recognition accuracy, automating the attendance-logging process and reducing manual tracking efforts.

Predictive Modeling via Correlational Feature Analysis | Prof. S M Towhid Islam

- Predicted student test scores with high accuracy across a cohort of 5000+ students by developing linear regression models that achieved an R-squared value of 0.85
- Identified factors that boost scores by 30% for students by performing feature analysis on the model's coefficients.

Community and Leadership Experience

InVenture Prize - Prototyped a smart pill dispenser using Arduino/C++ for precise, real-time dispensing and a Python GUI for user scheduling and data logging.

Hired Judges - Performed critical code reviews for peer developed software projects, providing constructive feedback to improve code quality and adherence to best practices.