

Neha Nataraj

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EDUCATION

Georgia Institute of Technology , Atlanta, GA <i>Bachelor of Science in Computer Science, Threads: Intelligence and Cybersecurity</i>	May 2028 GPA: 3.9/4.0
Relevant coursework: Linear Algebra, Multivariable Calculus, Object-Oriented Programming, Data Structures PrizePicks and Matt Steele Track Winner (1/450 participants) — AI ATL Hackathon	

Lambert High School , Suwanee, GA High School Diploma	May 2025 GPA: 4.71/4.0, Rank 6/783 (Top 1%)
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TECHNICAL SKILLS

Languages: Python, R, Java, JavaScript, TypeScript, Bash
Frameworks & Tools: AWS (Lambda, EC2, S3), REST APIs, Postman, React, Next.js, Node.js, OpenCV, scikit-learn, pandas, numpy, Git
Technical Focus: Machine learning, statistical modeling, data analysis, computer vision, backend integration, cloud-based systems, research & technical writing

EXPERIENCE

Scientific Computing / Research Software Intern <i>Georgia Institute of Technology, Center for Relativistic Astrophysics</i>	Sept. 2025 – Present Atlanta, GA
<ul style="list-style-type: none">Conduct computational simulation and large scale data analysis for the Trinity telescope project, optimizing high-throughput with Bash workflows and analyzing results in Python.Analyzed relationships between physical parameters (energy, wavelength) to improve signal identification and background rejection, with a focus on tau neutrino detection in high energy cosmic ray experiments.	
Machine Learning Intern <i>University of Georgia, Department of Statistics</i>	May 2024 – July 2025 Athens, GA
<ul style="list-style-type: none">Developed and evaluated p-value weighting approaches to improve genetic association accuracy across 16 traits and 6M SNPs using R and Python.Modeled q-value variance as a function of percent tagged variance (PTV) and implemented GWAS pipelines to identify links between traits and genetic variants.	
Software Engineering Intern <i>CyberSoftware</i>	May 2023 – Aug. 2023 Remote
<ul style="list-style-type: none">Worked on backend integration for a startup product, assisting with the implementation and testing of REST APIs using Postman and cloud services on AWS.Supported API debugging, request validation, and service configuration to improve reliability and data flow between system components.	

PUBLICATIONS

Nataraj, N. & Manoharan, A. (2024). *A Comprehensive Review of the Legal Challenges Posed by Deepfake Technology*. Journal of Student Research, 13(3). DOI: 10.47611/jsrhs.v13i3.7273.

PROJECTS

Founder of Bridge4Good, AI based Nonprofit Platform	May 2022 – Aug. 2025
<ul style="list-style-type: none">Built a random forest model in Python to target donations toward underserved regions, creating partnerships with 23 homeless shelters and raising \$16K+.Led expansion across 5 chapters in the U.S. and U.K., organizing events attended by 500+ people and contributing to outreach impacting 10,000+ individuals.	
NBA Gesture Predictor github.com/Pudging/AIATL	Fall 2025
<ul style="list-style-type: none">Built a real time NBA game prediction platform by developing a Node.js and Express backend with WebSockets to stream live play by play data, and a React frontend integrating TensorFlow.js MoveNet for webcam shooting gesture detection, earning 1st place in the PrizePicks and Matt Steele track out of 450 participants.	
Computer Vision Aided Navigation for the Blind	Oct. 2023 – July 2024
<ul style="list-style-type: none">Developed a low cost assistive navigation prototype using computer vision on a Raspberry Pi, providing real-time narration of surroundings as a \$10 alternative to existing \$4,000 solutions.Piloted the system in collaboration with the Karna Vidya Foundation to evaluate real world usability.	