Unnathi Utpal Kumar

404-563-2516 | ukumar39@gatech.edu | linkedin.com/in/unnathi-kumar | github.com/unnathik | unnathik.github.io

Education

Georgia Institute of Technology — Atlanta, GA
Bachelor of Science in Computer Science — Aug 2022 - May 2025 (expected)
Relevant Coursework: Object-Oriented Programming (Java), Python, Integral Calculus, Classical Mechanics
Activities: Technical Lead (Google Student Developer Club), Flight Delay Prediction Team (Big Data Big Impact)

Experience

Academic Mentor and Teaching Assistant — February 2022 – July 2022
Wolfram Research — Champaign, IL (Remote)
- Conducted instructional lessons on computational thinking and Wolfram language (WL) for 65+ school students
- Mentored high school students in computational projects ranging from linguistics, ML, and math using WL

Mobile Development Intern — January 2021 – March 2022
rapStudy — Beverly Hills, CA (Remote)
- Developed a **cross-platform mobile app**, with music streaming, using React Native, Firebase, and TypeScript
- Assessed and troubleshot bugs on the web app, built using React and JavaScript, to test with 5+ public schools

Software Engineering Intern — June 2021 – July 2021
NeST Group (Transportation Business Unit) — Kochi, India (Remote)
- Trained a **machine learning model** (with 7% improved accuracy) to detect vehicles in LiDAR point clouds based on the VoxelNet architecture for deployment in autonomous robotic components
- Analyzed and identified publicly available datasets with vehicle annotations through academic papers

Research and Projects

Predicting Job Anxiety Through Tweet Patterns | *Python, Selenium* — April 2021 – April 2022
- Researched in **Natural Language Processing** under Mr. Mayank Bhasin, Graduate Student at IIT Kharagpur
- Built an **SVM regressor** to predict level of work anxiety in corporates through tweets with **83% accuracy**
- Awarded **Best Paper** at International Conference on Computational Techniques and Applications (ICCTA) 2021 and published in **Springer's Topical Drifts in Intelligent Computing** (international and peer-reviewed)

AgriCultured | *Java, Python, TensorFlow Lite, Android Studio, Firebase* — April 2021 – November 2021
- Developed a native Android mobile app to promote sustainable farming with **AI-powered plant disease detection** (95% accuracy in TFLite model), **scientific farming calculators**, and **farming forums**
- Featured on Businesswire and presented at a **United Nations General Assembly Event** and **WWF Podcast**
- **Climate Award** ($1500 cash prize) and **Semifinalist for Senior Division**, Technovation Challenge 2021

Detection of Lung & Colon Cancer from Histopathological Images | *Google AutoML Vision* — July 2020
- Finalist, **Google Code to Learn Contest 2020** (national)
- Achieved **99.3%** accuracy for a **machine learning model** built with **Google AutoML** that diagnoses cancer

Technical Skills

Languages: Java, Python, JavaScript, HTML/CSS, TypeScript, SQL (certified by Coursera), Kotlin, Wolfram Language
Frameworks/Libraries: React, Node.js, WordPress, React Native, TensorFlow, Selenium, Pandas, numpy, Keras
Developer Tools: Firebase, Git, Android Studio, Adobe XD, Figma, Google Cloud Platform, VS Code, Mathematica

Leadership and Service

Founder and Coordinator — May 2021 – Aug 2022
girls.exe
- Initiated a non-profit to empower women in tech, spanning across India and MENA with 150+ registered members
- Organized 15+ remote workshops and an **all-female hackathon** with **200+ participants** and **9 corporate sponsors**, including Wolfram, the Art of Problem Solving, and Generation XYZ

Team Leader — May 2021 – Aug 2021
Child Rights and You (CRY)
- Taught underprivileged middle school children science twice a week and developed assignments to assess progress
- Managed and supervised a team of 7 volunteers in teaching 40+ middle school children