Rishab Paruchuri

US Citizen · +1 (470) 923-4886 · rparuchuri3@gatech.edu
linkedin.com/in/rishab-paruchuri/ · github.com/RishabParuchuri

Education

Georgia Institute of Technology – Atlanta, GA   Expected graduation: **May 2026**
Candidate for Bachelor of Science in Computer Science - **GPA: 4.0/4.0**
Concentration in Systems Architecture & Information Internetworks

Experience

Data Science Intern, John Deere Intelligent Solutions Group – Urbandale, IA   **May 2024 – Jul 2024**
- Developed patent pending algorithms to identify farming 'subzones' via clustering & image segmentation using PySpark, to improve the AutoPath/AutoTrac autonomous guidance tools
- Spearheaded discussions with product managers to deliver customer validation sets to two major agricultural organizations (100,000+ acres), securing endorsement for deployment in John Deere Operations Center
- Created CNN architecture using satellite imagery and digital elevation model rasters to detect agricultural terraces

Research Intern, Center for Innovation and Entrepreneurship at the
International Institute of Information Technology – Hyderabad, India   **Jul 2022 – Aug 2022**
- Profiled Artificial Intelligence, Blockchain, and Robotics startups in Hyderabad and created a database of 140 startups
- Authored "AI Hyderabad Startup Ecosystem Analysis" white paper, providing insights on local AI startups, industries, and technologies, enabling incubator to identify 15+ startups invited to participate in programs

Full-Stack Software Engineer Intern, WE Hub, Govt. of Telangana State, India   **Jun 2022 – Jul 2022**
- Crafted web pages using JavaScript, HTML, and CSS (Bootstrap) while integrating with a NodeJS backend, guaranteeing access to startup incubator resources for over 5,000 women entrepreneurs.
- Collaborated closely with the product team to design intuitive user interfaces for the "Udyamika" Platform, enhancing user experience and engagement, while ensuring accessibility to rural entrepreneurs across India

UI/UX Design Intern, Alison   **Jun 2021 – Jul 2021**
- Supported the design (Figma) of web applications as part of a new UI update of the Alison career guide page used by millions of learners, and created Python scripts to automate image downloading process for website design

Skills

Programming: Java, Python (Pandas, NumPy, Scikit-Learn, Matplotlib, SciPy, Flask), OpenCV, HTML, CSS, JavaScript, Django, SQL, C++, Bootstrap, C#, MATLAB, Firebase, npm, NodeJS, MongoDB, MySQL, Swift, Databricks, C, React, Spark, Tensorflow, Pytorch, Linux

Concepts: Object-oriented programming, data structures & algorithms, linear algebra, data science, discrete math, machine learning, computer vision, android development, iOS development, front-end development, back-end development, data modeling, AWS, cloud computing, full-stack web development, UIUX design, system design, databases, API design, statistics

Research

Research Scholar, Pioneer Academics with Susan Fox (Prof. CS, Macalester College)   **Feb 2022 – Jul 2022**
- Created a convolutional neural network, employing transfer learning with the VGG16 model, to attain superhuman accuracy in predicting geographical locations from images of ten cities
- Gained proficiency in image processing (OpenCV), machine learning algorithms, and deep learning techniques

Projects (see Github or LinkedIn)

Spotify Wrapped App
- Led a team of five using Agile processes (Scrum) as Product Owner in developing a mobile Android social media app using Java, allowing users to share their Spotify Wrapped summaries with others
- Integrated Spotify Web API to fetch user data, including most listened to songs and albums
- Utilized Firestore NoSQL database and Firebase Authentication for data storage and user authentication
- Implemented GitHub Workflows for CI/CD pipelines, ensuring automated testing and continuous integration

Seizure Prediction Model
- Developed a predictive healthcare solution using a Python-based Long Short-Term Memory model and EEG data to forecast real-time warnings for epileptic patients with over 90% accuracy.

MemoryScape
MemoryScape transforms photos and descriptions into captivating VR panoramas using generative AI
- Engineered an image processing pipeline by leveraging OpenCV for seamless image stitching, integrating DALL·E API for content infilling, and utilizing mathematical transformations to convert images to VR display format

Awards and Honors

- Georgia Tech Faculty Honors (Fall 2023, Spring 2024)
- Chi Psi at Georgia Tech Bryan Scholarship Finalist