Utkarsh NSR

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EDUCATION

Georgia Institute of Technology   Atlanta, GA
MS in Computer Science (GPA: 4.0, Specialization: Machine Learning)   May 2024
BS in Computer Science (GPA: 4.0, Highest Honors Graduate)   Dec 2022

EXPERIENCE

Software Engineer Intern   **ADP**   May 2023 – Aug 2023
- Enhanced product insights for the DocumentCloud product team by creating an advanced analytics solution on Metabase with 10+ years of product data on 100,000+ clients.
- Streamlined retrieval of daily information from the central MongoDB database in less than 30 seconds by engineering a Python algorithm with a recovery mode.
- Deployed the analytics solution to deliver the latest insights every 24 hours using Jenkins and Docker.

Software Engineer Intern   **NCR Corporation**   May 2022 – Aug 2022
- Reduced the time to simulate 100,000+ organizational transactions by approximately 89% by building a Windows application using C#, .NET, XAML, and MySQL.
- Optimized the performance of transaction generation by 67% by implementing a database connection keep-alive strategy.
- Facilitated the secure deletion of 60+ gigabytes of data by developing a rigorously tested purging utility.
- Ensured robust code quality by writing unit tests for 6 services using the Mock testing framework.

Software Engineer Intern   **NCR Corporation**   May 2021 – Aug 2021
- Accelerated microservice issue resolution time by 40% by developing a Dynatrace-based tool to monitor the health of 15+ Interactive Teller Machine microservices every 30 minutes.
- Developed microservice health assessment via Postman API requests, leveraged JavaScript for response parsing.
- Improved team responsiveness to issues from hours to minutes by configuring Statuspage for automated alerts during failure situations.

RESEARCH

Graduate Research Assistant   **Georgia Tech - Park Lab and OMSCS**   Jan 2023 – Present
- Exploring trends in age, gender, and grade distribution for 300+ Georgia Tech students in 2 labs (BioStats and Ecology) using Pandas and demographic data in Amazon S3.
- Investigating Virtual Ecological Research Assistant's effectiveness via goal-setting experiments with 80+ students.

Researcher/Technical Lead   **Georgia Tech - Smart City Lab**   Jan 2021 – Dec 2022
- Accomplished significant cost savings for GDOT, approximately $\sim$\$30 million annually, by designing a pipeline for LiDAR road sign detection and assessment.
- Minimized traffic sign condition classification time by 20+ hours through a Python-based classification algorithm.
- Reduced false positive sign detection rates by 77.8% by a Python-based post-classification algorithm and retro-intensity and sign points distribution analysis of 2.5+ million point cloud data using CloudCompare.

PROJECTS

- **Mental Health Monitoring Chatbot:** developed a mobile-based video chatbot to gather mental health data from patients everyday in under 5 minutes. Built using Android Studio, Java, and MongoDB.

- **Knowledge Based Agent for IQ Test:** designed an AI agent for IQ test using Python, achieving 70% accuracy on challenging questions. Nominated for best paper in class (Knowledge Based AI, Fall 2022).

SKILLS

Programming Languages: Java, Python, SQL/MySQL, JavaScript, CSS, HTML, C#
Data: Spark, Pandas, Scikit-learn, MongoDB, Seaborn, Matplotlib, Plotly, Metabase, Tableau
Frameworks: React, Flask, .NET, JUnit, Mock
Tools: Git, Jupyter Notebooks, Postman API, AWS, Docker, Jenkins
Certifications: Data Science Specialization, Data Analysis with Python, Machine Learning Specialization