Shivanee Jaiswal

shivanee.jaiswal@gatech.edu | +1 470-836-2117 | www.linkedin.com/in/shivaneej | www.github.com/shivaneej | Atlanta, GA

EDUCATION

Georgia Institute of Technology, Atlanta, GA, USA   Aug 2022 - May 2024
Master of Science in Computer Science (specializing in Machine Learning)   GPA 4.0/4.0
Courses: Algorithms, Machine Learning, Deep Learning, Data Viz. & Analytics, Multimedia Networking, Computer Vision

University of Mumbai, Mumbai, India   Aug 2016 - Oct 2020
Bachelor of Technology in Computer Engineering   GPA 9.26 / 10
Courses: Data Structures, Object Oriented Programming, DBMS, Software Engineering, Distributed and Cloud Computing

WORK EXPERIENCE

Software Engineer Intern   May 2023 - Aug 2023
Juniper Networks   Sunnyvale, CA
- Upgraded & deployed Node.js vulnerability tracking tool, resulting in the publication of **17 security advisories** for Q2 2023.
- Fine-tuned LLMs (Flan-T5, MBART 50, Llama2) for generating snippets of search engine results with a ROUGE score of **52%.**
- Applied Performance Efficient Fine Tuning using Low-Rank Adaptation (LoRA) to reduce trainable parameters by **98%**.
- Explored the LangChain framework to build a Question Answering system for a dataset of **30,000+** articles.

Computer Vision Intern   Apr 2022 - Jun 2022
Trisetra Inc   Remote
- Trained an SSD model with **88.6% accuracy** using Tensorflow Object Detection API to detect window blinds in images.
- Implemented dominant color recognition in images le unsupervised learning & image processing to generate 3D assets.
- Compiled a comprehensive database of **~1000** furnishing products by scraping websites with BeautifulSoup.

Associate Software Engineer   Jul 2020 - Jan 2022
Wissen Technology   Mumbai, India
- Built Spring & Spring Boot services to build financial reports by querying **> 21 million rows** from multiple data sources.
- Optimized complex SQL queries to fetch metadata, resulting in a **67% reduction** in query execution time.
- Developed a reusable Angular-based UI library for rendering financial reports and dashboards from JavaScript configurations.
- Wrote a Python script to query ~**28 million rows** of data from Teradata and convert them to Tableau Extract.
- Configured CI/CD pipelines leveraging Jenkins, and increased coverage of unit & end-to-end test cases by **43%+.**

PROJECTS

Prompt-based Journaling App | SwiftUI, Flask, LangChain, Heroku, Firebase [GitHub]   Oct 2023
- Architected an iOS journaling app & REST API under 36 hours, with daily prompts and interactive stickers to foster social connections.
- Collaborated in a team of 4 to develop the app utilizing SwiftUI, Firebase Authentication, and Realtime Database.
- Incorporated LLM-generated daily prompts based on previous entries using Flask, LangChain, and GPT 3.5.

SageVR: A Novel Approach to Conventional Therapy | Unity3D, C#, Meta VoiceSDK, ChatGPT [GitHub]   Apr 2023
- Developed a VR application for Meta Quest 2 on Unity to support therapeutic conversation with the user's older self.
- Integrated GPT for generating dialogue and employed prompt engineering to simulate the older self's responses.
- Used VoiceSDK and Wit.AI to implement real-time text-to-speech & speech-to-text conversion, with < 5s response time.

Big Data Song Visualization & Analysis | JavaScript, Python, PySpark [Poster] [Website]   Feb 2023 - May 2023
- Built an interactive network graph using the Million Song Dataset and D3.js to recommend similar music artists.
- Used PySpark to preprocess the dataset by filling in missing values and computing aggregated metrics for the visualizations.
- Conducted 5 user interviews to evaluate the dashboard on various metrics like usability, usefulness, etc.

SKILLS

Programming: Java, Python, C/C++, MATLAB, HTML/CSS, TypeScript, JavaScript, Swift, Scala, PHP
Tools & Frameworks: Node.js, Flask, Angular, Spring Boot, Express.js, REST API, Git, Jenkins, Docker, Spark, SwiftUI
Machine Learning: Keras, Tensorflow, PyTorch, OpenCV, NumPy, Pandas, Scikit-Learn, HuggingFace, LangChain
Databases, Platforms, OS: SQL, MongoDB, Google Cloud Platform (GCP), Amazon Web Services (AWS), Windows, Unix

ACTIVITIES

- **Group Leader** for **10+** students, offering campus resources, academic success strategies, and time management guidance
- Won the 'Best use of Omniverse' track at ImmerseGT for SageVR out of **58 teams** and **550+ participants**
- Freelance Technical Writer with **65,000+ blog views** [Medium] [KnowledgeHut]
- Coached **127** Government School Teachers in Python to introduce it in the official school curriculum
- **Volunteer** at NavGurukul, taught Python to **25+** female students, curated content used by **20,000+ users**