Ghritachi Mahajani

ghritachimahajani5@gmail.com | (720) 334-4815 | linkedin.com/in/ghritachi-mahajani/ | gritsiem.github.io

EDUCATION

Masters of Science, Computer Science, University of Colorado, Boulder

May 2025

GPA 4.0 Courses: Natural Language Processing, Distributed Systems, Data Center Scale Computing, Machine Learning Bachelors of Technology, Computer Science and Engineering, SRM Institute of Science and Technology May, 2019 Graduated First Class with Distinction

CGPA **9.45/10**

SKILLS

Programming Language: Python, JavaScript, C++.

: SQL, Python for statistics (Pandas, Numpy, Scikit-Learn), Apache Spark, Redis **Data & Tools**

Machine Learning & AI: PyTorch, Keras, Transformers, LLMs, Supervised/Unsupervised Learning, Optimization

Full Stack : React, Node.js, Django, MongoDB, PostgreSQL, Flask, HTML/CSS

Cloud & DevOps : Google Cloud (GCP), Docker, Kubernetes, Git, CI/CD

WORK EXPERIENCE

Summer Research Assistant

June 2024 - August 2024

Institute of Cognitive Science, CU Boulder

Boulder, CO

- Explored the use of LLM to classify and reason about the explainability of veteran interviews for easier transition into
- Applied prompt engineering and few-shot learning techniques to analyze qualitative data using LLMs, contributing to a published research paper.

System Engineer July 2019 - August 2023

Tata Consultancy Services

Delhi, India

- Developed high-availability customer loyalty web application, optimizing code for scalability and user engagement in production environments, leading to 100% customer satisfaction.
- Delivered an Angular-Ionic Android mobile application as a single member team, responsible for end-to-end development.
- Collaborated on integration of CI/CD workflows and code versioning using Git, improving deployment reliability and engineering efficiency.

PROJECTS

Al Integrated Log Analysis Application (University Course Final Project) | Link

2023

- Deployed a distributed containerized services-based application on Google Cloud Computing that takes log files asynchronously and stores them along with AI generated analysis of the logs, with authenticated user access.
- Implemented the cloud infrastructure using Elasticsearch for storage, Redis as message queue, Flask for REST, AWS S3 for storing files, Llama 3 Large Language Model for generating AI insight and Kibana for visualization.

IBM Cloud Specialization Capstone Project

2021

- Developed a full stack car dealership application using Django, containing an admin site to manage data. Deployed using IBM Cloud foundry, IBM Container Registry (Kubernetes), a sqlite3 database, and Github to store the code.
- Integrated IBM Watson APIs for sentiment analysis of reviews to classify them and display appropriate emojis.

Image Captioning System (Undergrad Capstone Project) | Link

2019

- Trained and compared deep learning encoder-decoder models (consisting of LSTMS, word embeddings and pre-trained CNNs) for image caption generation on a dataset of 8000 images, using Tensorflow, Numpy, Keras.
- Achieved 13% improvement on baseline model by optimization techniques like fine-tuning and vocabulary reduction.

CO-CURRICULARS

Publications: Yarlagadda et al., An Al-Powered Interactive Interface to Enhance Accessibility of Interview Training for Military Veterans, International Conference on Multimodal Interaction (ICMI). Link Certifications: IBM Full Stack Software Developer Professional Certificate: Docker, Kubernetes, cloud, CI/CD etc. 2024