SHREYA SHARMA

+1 640 204 9203 • ss.shreyasharma1609@gmail.com • lshreyasharma1.github.io • linkedin.com/in/shreya916

TECHNICAL SKILLS

Languages: Java, Python, JavaScript, TypeScript, SQL

Tools and Technology: Spring-Boot, Hibernate, Reactive Spring, Django, React-JS, Apache Kafka, MySQL, MongoDB, AWS (EC2, ELB, RDS, S3), Docker, Kubernetes, Git, Maven, RESTful APIs, PyTorch, TensorFlow, Large Language Models (LLMs), pandas, NumPy

WORK EXPERIENCE

Graduate Research Assistant   Mar. 2024 – Present
SNF Agora Institute, Johns Hopkins University   Baltimore, MD
- Developed Python scripts to extract sermons from YouTube videos, leading to a large-scale dataset of 10,000 transcripts.
- Applied NLP techniques to analyze socio-political messaging for understanding of the religion-politics intersection.

Full-Stack Software Developer Intern   Jan 2024 – Present
dearYou Health   Baltimore, MD
- Led the development of a mobile application allowing students to connect with certified mental health professionals tailored to their preferences. Spearheaded the team in delivering the initial prototype within just one month.
- Devised the architecture of the app using Expo and Firebase, implementing robust features such as user authentication, validation, and database modeling. Additionally, mentoring a team of 5 members on these frameworks.

Graduate Research Assistant (SDE and NLP)   Aug 2022 – Jan 2024
Center for Language and Speech Processing, Johns Hopkins University   Baltimore, MD
- Developed a React-JS application and hosted it on AWS for users to annotate a dataset of 1000 decompositions of hypothsis on paramaters such as truthfulness, redundancy, relevance, and explanation on their scores.
- Composed a dataset to enhance internal consistency of annotators by +9% and employing knowledge distillation to train GPT models to improve accuracy and proof quality in reasoning engines.
- Designed a tool to benchmark LLMs in extracting analogies from big datasets, with human evaluation confirming the task's well-defined nature through unanimous agreement among annotators.

Senior Software Developer   June 2019 – July 2022
MakeMyTrip   India
- Created efficient travel booking and reporting backend microservices, reducing response time by 0.6 seconds and boosting platform traffic by 25%.
- Constructed a novel multi-level approval workflow with a dynamic 'Policy Management System', automating approval flows for 30,000 daily booking requests to enhance efficiency.
- Implemented reactive micro-services and database for managing user reimbursements in travel bookings, leading to the successful launch of a new product on MakeMyTrip's corporate platform and a 10% increase in client acquisition, earning recognition with the GoTripper of the Month award.
- Built a Kafka-based high-throughput, fault-tolerant data pipeline to oversee 1 million daily wallet transactions, resulting in a 35% decrease in operational issues.

PUBLICATIONS [LINK]

Co-authored over 5 research papers in prominent venues in NLP (ArXiv, ACM-ICMI) and ML (JCM, IEEE-ISAP).

EDUCATION

Master of Science in Engineering in Computer Science   Aug. 2022 – May 2024
Johns Hopkins University

Bachelor of Technology in Computer Science   Aug. 2015 – May 2019
Indraprastha Institute of Information Technology (IIIT), New Delhi, India

PROJECTS [LINK]

Comprehend.it: A user-friendly Django app that generates educational materials from videos via auto-to-text and prompt engineering. ML models were integrated via LangChain. The project was rated among the top 3 out of 12.

LangPrep: Developed and hosted an AWS app for pronunciation learning, using Textract for OCR and Polly for text-to-speech, with S3 storage.

SMI Management: Created Android and Django apps for managing Severe Mental Illness at AIIMS Delhi, a premier hospital in India. The project was featured in the Times of India, a national print publication. [article]