Naman Khurpia

• Buffalo, NY, 14214 • (716) 259 5818 • namankhurpia2@gmail.com • LinkedIn • namank.xyz • blog

TECHNICAL EXPERIENCES

Inpleo LLC, Pittsburgh, Pennsylvania, *Machine Learning Engineer* *March 2024 – present*

- Developed OCR model using **LayoutLMV3** with **Pytorch Lightning module**, working with Multiple GPUs and maintaining memory overload, consuming heavy sets of data with Kafka, Setting up new **Kafka topics** and **Kafka broker** agents.

Eitacies Inc, Santa Clara, California, *Machine Learning Engineer Intern* *August 2023 – January 2024*

- Developed NLP Model to detect **Racial discrimination** from video dataset, collaborated with a Realtime pipeline for detection.

OneDataShare, Research Assistant, Buffalo NY, *Cloud Developer* *January 2023 – May 2023*

- Collaborated at Transfer Scheduler, facilitating transfer of terabytes of data from Google Drive, S3using **Kafka and RabbitMQ**
- Implemented **PKI** secrets engine using **Vault**, enabling token management with fine grained **ACL policies**.

TATA Consultancy Services –Digital, Bangalore, India, *System Engineer (Machine learning Engineer)* *Aug 2020 - July 2022*

- Built and trained an NLP model to optimize code conversion from one syntax to another using RNNs, identifying and resolving ambiguities. Achieved an impressive accuracy of 88% for converting Cobol to Java (Spring) for 10 million lines.
- Led the design and development of Western Union's money transfer solution using Spring Java Microservice, collaborating with 10+ teams and re-architecting the WillCallStore (WCSTOX) program's solution to manage transactions from 50+ countries.
- Developed a microservice layer that validates and stores all money order records in postgres and connecting data-stream Kafka, configurations of multiple Kafka topics, devised a common encryption layer to ensure the security of sensitive data.

TATA Consultancy Services, Bangalore, India, *Systems Engineer Intern* *Jan 2020 - April 2020*

- Collaborated at CMA to support the development of a large, scaled solution for a MNC, server-side load balancing-Netflix OSS.

EDUCATION

Master of Science – Computer Science and Engineering GPA 3.83 out of 4
The State University of New York at Buffalo *January 2024*

Bachelor of Technology – Computer Science and Engineering GPA 8.49 out of 10
VIT University, Vellore Institute of Technology *June 2020*

SKILLS

Machine learning skills – Transformers, LLMs, Pytorch Lightning, Hydra, Tensorflow.
Programming Languages – Java, Python, TypeScript, JavaScript.
Frameworks – Spring Boot, Node JS, Native Android App Development, Angular 14, React JS.
Cloud technologies – AWS EC2, Elastic Beanstalk, EC2, S3, Lambda.
Tools – Docker, Apache Kafka, Rabbit MQ, Jenkins, SonarQube, Redis, Git, Netflix OSS, Zuul, SQL, MongoDB, CheckMarx, Vault.

PROJECTS GitHub

- **AdmitWise** (2023), *School of Computer Science* – Created an Admissions portal where we evaluated profiles to analyze applicant's documents like Resume, SOP, test scores and ranking them. (Transformers for classification and evaluation). Link
- **OpenAI API Build Tools** (2023), *Personal Project* – Designed **Maven** and **Gradle** build tools for Chatting, Vision, Speech, DallE, Moderation - API, enabling asynchronous calling of all endpoints, Implemented multithreading support. Link
- **Clickbait spoiler Detection (Masters Major Project 2023)** *School of computer science* – Classifying clickbait spoiler type, detecting clickbait spoiler in Paragraph, Phrases and Multi lined Posts using different State of the art Algorithms – trained and fine-tuned RoBERTa, DistillBERT, Sentence Transformers – cosine similarities, achieved 73% accuracy. Report
- **Dall E 2 Client (2023)** *Personal Project*– An open-sourced Android App that allows content creators to generate images using OpenAI's - Dall-E API and publish their results on social media. Link
- **Car Agent reward-based reinforcement learning** project (2023) *School of computer science* - Implemented a graphical grid world with different reward-based algorithms - greedy, SARSA, Q-learning using different strategies- stochastic, deterministic.

RESEARCH PAPERS

- Clickbait spoiler detection and classification using Transformers 2023. Link
- Analysis of Machine code using Natural language processing -IEEE 2021. Link

ACHIEVEMENTS

- Mentor at Grace Hopper Conference 2023, Open-source contribution to **NodeJS-core** repository. 2023
- Special Achievement Award by TCS – Employee of week during award Sprint. 2021