

Pinki Kumari

Portfolio | LinkedIn | Email

Education

| Degree | Institution | Department | CPI | Year |
|--------|--|--------------------------------|------|-------------|
| MTech | Indian Institute of Technology Gandhinagar | Computer Science & Engineering | 8.0 | 2022 - 2024 |
| BTech | VGI Microsoft, Greater Noida (AKTU) | Computer Science & Engineering | 8.33 | 2016 - 2020 |

Experience

- **Software Development Engineer, Texas Instruments** Bengaluru, India [Aug 2024 – Present]
 - **Tech Stack:** Java, Spring Boot, React, JavaScript, SQL, Jenkins, Linux, OKD, Git
 - Built and maintained backend and frontend components for enterprise manufacturing and quality systems, supporting complex workflows, validations, and data consistency.
 - Resolved non-trivial production issues by tracing execution across services, workflows, and database layers, eliminating recurring failures and edge-case defects.
 - Delivered features end-to-end — from implementation and testing to release and production support — ensuring stable deployments.
 - **Additional Responsibility:** Assisted with application infrastructure operations including server maintenance, credential rotations, Tomcat upgrades, and certificate renewals.
- **Teaching Assistant, Indian Institute of Technology Gandhinagar**
 - Software Engineering & Testing (SET). [Jan - May 2024]
 - Computing (ES112): Designing and conducting lab tasks and checking assignments. [Aug - Dec 2023]
 - Aarohan (FP601): Managed orientation of 450+ students with a team of 25 TAs and was in the backend team, including five people. [July 2023]
 - Data-Centric Computing: Conducted labs and tutorials on topics of ML, EDA, Algorithms. [Jan - July 2023]
 - Computer Networks (CS433): Handled a class of 75+ students, conducted quizzes, checked assignments, and assessed final project presentations. [Aug - Nov 2022]
- **Summer Intern, ThirdAI Corp.** [Hybrid, June 1st - July 31st, 2023]
 - Utilized ThirdAI's Universal Deep Transformer (UDT) for pre-training, training, and fine-tuning LLMs on CPU instead of GPU.
 - Embedded evaluation system for benchmarking various models like BERT, Open AI, LLaMA, and BOLT.

Skills & CourseWork

- **Programming Languages:** Java, Python, SQL, JavaScript, C
- **Backend & Frontend:** Spring Boot, REST APIs, React, Flask
- **Databases & Systems:** Relational Databases, SQL Query Optimization, Workflow-Based Systems
- **Tools & Platforms:** Git, Jenkins, Linux, OKD (OpenShift), Mendix, VSCode
- **Software Engineering:** Debugging, Testing, CI/CD, Release Management, Production Support
- **Course Work Academics :** Data Structures & Algorithms, Data Bases, Computer Systems, Artificial Intelligence, Machine Learning, Deep Learning, NLP, Automatic Speech Recognition

Projects

- **Automatic Speech Recognition(ASR) using Neural Tangent Kernels(NTKs)** [Jan 2023 - May 2024]
 - ASR on Amharic Audio Language that is build on neural tangent kernels (no need of neural networks), under the guidance of Prof. Anirban Dasgupta.
- **Comprehensive NLP Analysis and Language Modeling** [Aug - Nov 2023]
 - Implemented data scraping from subreddits (e.g., r/india, r/china), sentiment analysis using Hugging Face models, n-gram language modeling with custom smoothing techniques, and pretraining/fine-tuning of BERT for classification and question-answering tasks, demonstrating proficiency in NLP and collaborative teamwork.
- **Online Maintenance Complaint Portal** [Jan - April 2023]
 - Designed a website for IIT Gandhinagar, addressing page reloading, authentication, and security vulnerabilities.
 - Enhanced user experience and fortified the website against potential threats.
- **Machine Learning** [Jan - Oct 2023]
 - Trained a Named Entity Recognition (NER) model using spaCy to extract legal entities from legal documents.
 - Created a Pypi library customized-decision-tree-library.
 - Created a Streamlit application to visualize the effects of cross-covariance by a 3-sigma ellipse plot.

- **Contact List Search** [BTech Project]
 - Developed a web application for contact management, featuring contact addition and deletion capabilities.
 - Implemented autocomplete functionality for real-time contact name suggestions while typing.

Achievements

- Qualified for the GATE (CS) twice (2021, 2022)
- Solved 350+ questions on LeetCode with a contest ranking of 1447/461,271, as well as additional questions(210+) on codechef, (ML problems practise) on Kaggle.