

# 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

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- 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.