

# Nithin Ram Kalava

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## EDUCATION

Vasireddy Venkatadri Institute of Technology (VVIT)  
Bachelor of Technology in Computer Science & Engineering; CGPA: 8.28/10.0  
– Relevant Coursework: Data Structures & Algorithms, Object-Oriented Programming, Database Management Systems, Operating Systems, Artificial Intelligence, Machine Learning, Cloud Computing.

Guntur, India  
Dec. 2021 – June 2025

## PERSONAL PROJECT EXPERIENCE

AI-Powered PC Recommender System – Creator & Full-Stack Engineer  
Personal Project  
– Engineered an end-to-end AI system with a Python/ML backend for component ranking and a PostgreSQL knowledge base using PL/pgSQL, ensuring 100% configuration compatibility.  
– Implemented a comprehensive ETL data pipeline involving web scraping, cleaning with Pandas, and transformation for a dataset of over 5000 hardware components.  
– Designed a dual-interface frontend (conversational LLM & expert builder) using Next.js/React. (Live Demo)

Post-Quantum Cryptography Library (‘pqc’) – Open Source Developer  
Personal Project  
– Developed and published a high-performance, pure JavaScript library implementing complex NIST PQC standards.  
– Achieved real-world adoption with 1900+ NPM downloads and performance of >2300 keygen ops/sec.  
– Built an interactive visualization tool (‘PQC-Vizz’) with React/Next.js. (Live Demo)

Guntur, India  
Sep. 2024 – Dec. 2024  
Guntur, India  
Jan. 2025 – April. 2025

## ADDITIONAL PROJECTS

CareerPath Navigator | TypeScript, Next.js, React, CI/CD, Framer Motion  
– Architected and deployed a user-centric, full-stack educational platform with recommendation algorithms, focusing on performance, accessibility, and automated CI/CD deployment via Vercel. (Live Demo)

Math Minute | Java, Android SDK, SQLite  
– Developed a native Android application using Java and strong OOP principles, featuring adaptive algorithms and local data persistence with an SQLite database.

## TECHNICAL SKILLS

Languages: Python, Java, JavaScript, TypeScript, SQL (PostgreSQL/PLpgSQL), C/C++  
Frameworks & Libraries: React, Next.js, Scikit-learn, Pandas, NumPy, TensorFlow, PyTorch, Node.js  
AI/ML: Generative AI, LLM Development, Deep Learning, NLP, Data Pipelines (ETL), Vector Search  
Databases & Cloud: PostgreSQL, MySQL, Oracle Cloud, AWS, Google Cloud Platform (GCP), Docker, Vercel (CI/CD)

## KEY CERTIFICATIONS

IBM AI Engineering Professional Certificate Link  
IBM AI Developer Professional Certificate Link  
Natural Language Processing Specialization (DeepLearning.AI) Link  
Deep Learning Specialization (DeepLearning.AI) Link  
TensorFlow: Advanced Techniques Specialization (DeepLearning.AI) Link  
AWS Academy Graduate - Data Engineering Link

May 2025  
May 2025  
Dec 2024  
Feb 2024  
Apr 2024  
Aug 2024

## LEADERSHIP & ACTIVITIES

Leadership: Lead Member of college Coding Club; organized technical workshops and mentored 100+ peers.  
Cloud Infrastructure: Manage a home lab (NAS, server) and a public-facing AdGuard Home DNS server on Oracle Cloud.