NIKHIL KADAPALA

SOFTWARE (AI/ML) ENGINEER

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SUMMARY

Recent M.S. Computer Science graduate seeking Software Engineer roles specializing in AI, ML, and Generative AI. Demonstrated ability to design and build complex AI-driven systems, including an open-source claim normalization tool leveraging state-of-the-art LLMs.

Proficient in Python & PyTorch for model development; FastAPI & WebSockets for streaming APIs; React for frontend; AWS, Heroku, Render & Vercel for deployment. Strong foundation in Neural Networks, NLP, LLMs training and fine-tuning, prompt engineering, and AI evaluation metrics.

Ready to apply this blend of academic research and engineering to enhance information clarity, model faithfulness and build production-ready AI/ML solutions.

SKILLS

Languages/Frameworks: Python (advanced), Java, C, JavaScript/TypeScript, SQL
ML & AI: PyTorch, Transformers, Hugging Face, Prompt Engineering, LoRA, RAG, LLM-fine-tuning, MCP
Backend & DevOps: FastAPI, WebSockets, Docker, AWS (EC2, S3, Lambda, Sagemaker, Bedrock), Heroku, Render, Vercel
Frontend: React, HTML, CSS
Tools & Practices: Git, GitLab, GitHub, Agile / SCRUM, SDLC

PROJECTS

Claim Normalization Platform (CLEF-2025 CheckThat! Lab) | Full-stack GenAI App   **GitHub**

- Engineered full-stack AI application: React/TS frontend (Vite, Tailwind, Radix UI) on GitHub Pages; FastAPI backend with async streams & WebSockets on Render via Docker CI/CD.
- Integrated 8+ LLMs (GPT-4/4.1, Claude 3.7, Gemini 2.5, LLaMA 3.3, xAI Grok3) with Zero-shot, Few-shot + CoT prompting and custom "Claimify" system prompts.
- Developed iterative SELF-REFINE/CROSS-REFINE pipelines and structured output using Pydantic schemas; achieved 93 % METEOR and normalized 10K+ claims 30 % faster.
- Built streaming chat interface and batch evaluation mode with real-time terminal-style updates and progress bars; optimized prompts & caching to reduce inference cost by 28%.
- Key Skills: Python, PyTorch, FastAPI, WebSockets, React, TypeScript, Docker, MLOps, Prompt Engineering, NLP Evaluation Metrics.

Resume - Job Description Ranking (Master's Project)   **GitHub**

- Built a scalable NLP pipeline for automated candidate–job matching using model distillation (Gemini-2.5-Flash), LoRA parameter-efficient fine-tuning (Gemma-3-12B), and cloud deployment (Together.ai).
- Engineered robust structured data extraction workflows via Markdown normalization and Pydantic validation for resume/JD parsing.
- Automated structured output generation: candidate fit classification, holistic match scores (1–100), evidence-based rationales, and targeted skill-gap recommendations.
- Conducted ranking evaluation against human annotators on a real-world dataset (65 resumes × 5 job descriptions), employing Kendall's Tau-b to assess correlation between model and human rankings, demonstrating explainable, human-comparable results for AI-powered recruitment automation.

EDUCATION

Master of Science in Computer Science   **Aug 2022- May 2025**
University of New Hampshire, Durham, NH
Relevant Coursework: Advanced topics in NLP(FAccTML, Interpretability), Data Science for Knowledge Graphs & Text, Neural Networks, Data Structures and Algorithms, Advanced Computer Networks, Systems Programming, Software Security.

PROFESSIONAL EXPERIENCE

University of New Hampshire   Durham, NH

Information Technology Help Desk Technician   Aug 2024 - May 2025

- Provided technical support to end-users via phone, email, and in-person, resolving hardware, software, and network issues.
- Troubleshooted and resolved a wide range of technical problems, including operating system errors, application malfunctions, and network connectivity issues.
- Installed, configured, and maintained computer systems including re-imaging and end-point management.
- Assisted with user account management, including creating new accounts, resetting passwords, and managing user permissions.
- Documented all support requests and resolutions in a ticketing system.
- Contributed to maintaining a knowledge base of common issues and solutions.

Tata Consultancy Services (TCS)   Nagpur, India

SAP Security Consultant   Feb 2021 - Aug 2022

- *SAP Security Management:* Managed user accounts, roles, and authorizations, ensuring segregation of duties compliance.
- *Security Implementation and Monitoring:* Configured and implemented security measures, monitored security incidents, and ensured compliance with regulations.
- *User Training and Documentation:* Provided training on security best practices and created documentation on security configurations and procedures.

Electronics Corporation of India Limited (ECIL)   Hyderabad, India

Automation Engineer Intern   May 2019 - Aug 2019

- *Automation System:* Implemented an automated pipeline control system using PLC and SCADA for oil and gas operations.
- *Control and Monitoring:* Executed control logic, monitored critical parameters, and generated alarms for timely intervention.
- *Data Management and Integration:* Collected data, generated reports, and integrated SCADA with external systems like SAP for data exchange and analysis.

KrazyBee Services Private Limited (FinTech)   Hyderabad, India

Campus Ambassador   Aug 2017 - May 2019

- *Responsibilities:* Driving product advertising, promotional events, and student sign-ups.
- *Key Achievements:* Successfully organized promotional events, implemented effective advertising strategies, and achieved high student sign-up rates.
- *Stakeholder Relations:* Developed and maintained strong relationships with college management, faculty, and student community leaders.