# Keenan Kalra

linkedin.com/in/keenan-kalra

### **EDUCATION**

### • University of California, Davis

Davis, CA

Bachelor of Science in Computer Science; GPA: 3.8

Dec 2024

- o Dean's Honors List: Multiple semesters
- Relevant Coursework: Artificial Intelligence, Machine Learning, Probability and Statistics

### EXPERIENCE

• Oracle Austin, TX

Software Engineer

Jun 2025 - Present

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• AI Infrastructure for Real-Time GPU Monitoring: Developing an AI infrastructure platform using Prometheus, Oracle Kubernetes Engine (OKE), and Terraform to monitor GPU metrics in real-time across distributed cloud instances. Designed alerting, dashboarding, and logging systems to support large-scale LLM and AI workloads.

• Oracle Austin, TX

Software Engineer Intern

Jun 2024 - Sep 2024

- Chatbot Development with Generative AI and RAG: Implemented a Generative AI-driven chatbot integrated with Oracle Identity Governance (OIG) using Retrieval-Augmented Generation (RAG) techniques.
  Reduced information retrieval time by 3x through real-time, AI-powered responses, streamlining identity workflows and enhancing user experience.
- Agentic AI Automation for Identity Workflows: Built an agentic AI system combining a RAG-based chatbot and Cohere's multi-step tool use to automate Oracle Identity Manager (OIM) tasks like user data retrieval and policy updates. Enhanced system interoperability and reduced manual workload by 50%.

### • Center for Mind and Brain

Davis, CA

AI Research Assistant

Apr 2023 - May 2025

- Lead Developer for AR Assistive Device: Led development of a wearable AI-powered AR assistive device, leveraging ASR and diarization models to achieve a 15% improvement in transcription accuracy. Demonstrated scalable AI deployment for accessibility applications, aligning with real-world impact goals.
- Cloud Migration and Dockerization of ASR Systems: Spearheaded the migration of ASR systems from offline models to cloud-based solutions utilizing AWS Transcribe and Google Cloud Speech-to-Text, incorporating Docker pipelines to streamline deployment and scalability by 50%.

## PROJECTS

- FAQ Chatbot with Retrieval-Augmented Generation (RAG): Built an FAQ chatbot leveraging OpenAI GPT models and RAG to retrieve and summarize data from a company's FAQ section. Created a FAISS-based vectorized database, deployed via Streamlit, and logged interactions with AWS S3 for continuous improvement. Designed a scalable NLP pipeline to preprocess and vectorize data for efficient retrieval.
- Trash Classification Model with ResNet50: Trained a ResNet50-based deep learning model for multi-class waste classification, achieving 94% accuracy. Optimized performance through data augmentation and hyperparameter tuning. Deployed the model using Docker, demonstrating scalability and applicability to real-world use cases.

#### SKILLS

- Languages: Python, SQL, C++, Java
- Machine Learning Frameworks: PyTorch, TensorFlow, Scikit-Learn, Hugging Face, Keras
- Tools and Platforms: Docker, FAISS, AWS (S3, Transcribe, SageMaker), Google Cloud, OCI (23ai), Git, Linux
- Core Skills: NLP, Transfer Learning, Data Preprocessing, Feature Engineering, Data Visualization, Model Deployment

#### CERTIFICATIONS

• AWS Certified Machine Learning – Specialty	Oct 2024
• Oracle Machine Learning using Autonomous Database 2024 Certified Associate	Sep 2024
• OCI 2024 Certified Data Science Professional	Aug~2024
• OCI 2024 Generative AI Certified Professional	$May\ 2024$
AWS Certified Cloud Practitioner	Dec 2023