Lan-Anh (Lanni) Dang-Vu

ldangvu243@gmail.com | LinkedIn | GitHub | Portfolio | Irvine, CA

Experience

IT Leadership Program Associate (Software Engineering Rotations) Jul. 2025 – Present
Pacific Life *Newport Beach, CA*

- **3rd Rotation: AI Platform Engineer (Aug. 2026 – Present)**
  - Building a reusable agentic enterprise search platform on AWS Bedrock AgentCore, designed for use across business divisions, with LLM access via a LiteLLM/MuleSoft gateway.
  - Developing AWS Lambda services and APIs for agent invocation, secured with a request interceptor, Cedar authorization policies, and identity token claim mapping; provisioned with Terraform and deployed via CI/CD.
  - Implemented a validation layer that checks retrieved results before the agent responds, improving search accuracy and reliability.
- **2nd Rotation: Analytics Engineer (Feb. 2026 – Aug. 2026)**
  - Stepped in as technical lead for a Snowflake-based document ingestion and AI search platform, processing 300+ multi-page documents across evolving stakeholder use cases.
  - Optimized a RAG pipeline (Snowflake Cortex, Python, SQL) via agent instruction design, metadata enrichment, embedding caching, retrieval scoring tuning, and a user feedback loop, raising answer accuracy from 83% to 94% across 600 UAT questions.
  - Built automated evaluations (AWS AgentEval and Cortex Agent Evaluations) for retrieval accuracy and source attribution, plus an Azure DevOps CI/CD pipeline for cross-environment releases.
- **1st Rotation: Data Engineer (Jul. 2025 – Feb. 2026)**
  - Built production ETL pipelines in Python and SQL using Snowflake, Matillion, and Control-M to generate and deliver asset cashflows, processing 2M+ data fields.
  - Re-architected and automated the cashflow delivery process, cutting batch processing time by 50% (30 min to 15 min per batch) and removing manual steps.
  - Deployed SQL data validation rules to production that flag data integrity issues and alert stakeholders before they reach downstream reporting.

Machine Learning Engineer - Team Lead (Capstone) Jan. 2025 – Jun. 2025
Sound Ethics *Irvine, CA*

- Led a team of 7 students on an industry-sponsored project researching and developing AI-generated music detection to protect artists from deepfake copyright infringement.
- Developed and trained audio-processing and machine learning pipelines using Python, PyTorch, Google Cloud Platform, librosa, ffmpeg, and mutagen.
- Improved RawNet2 by integrating a cosine similarity classifier and CLAD loss function, boosting accuracy to 88% on real music and 92% on generated audio, with up to +76 points over baseline on augmented inputs.

AI/ML Undergraduate Researcher Oct. 2024 – Jun. 2025
UCI's Donald Bren School of Information and Computer Sciences *Irvine, CA*

- Designed and developed object-oriented Python pipelines for cross-dataset benchmarking and evaluation of human pose estimation models on Unix-based HPC systems.
- Published research findings on arXiv at `https://arxiv.org/abs/2505.10888v2`

Technical Skills

Languages: Python, SQL, C++, C, HTML/CSS
AI/LLM: RAG, AI Agents, AWS Bedrock AgentCore, Snowflake Cortex, LiteLLM, Embeddings, Prompt Engineering, LLM Evaluation, Claude Code, GitHub Copilot
ML Libraries: PyTorch, TensorFlow, pandas, NumPy, Matplotlib
Cloud & Data: AWS (Lambda, Bedrock), GCP, Terraform, Docker, Azure DevOps, CI/CD, Git, Snowflake, Postgres, Matillion, Control-M

Education

University of California, Irvine Irvine, CA
Bachelor of Science in Computer Science *Sep. 2021 – Jun. 2025*
Dean's Honor List Recipient — 6x

- **Organizations:** Executive Chair for AI @ UCI; Women in Information and Computer Sciences (WICS)