Nguyen Thien Nhan

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Education

AIO 2023 - AI Viet Nam   Sept 2023 – May 2024
- The course covers knowledges about Machine Learning and Deep Learning in detail

Ho Chi Minh City University of Technology and Education   Sept 2021 – Now
- GPA: 3.25/4.0
- Major: Information Technology

Activities

GenAI4E Club Member   Aug 2024 – Dec 2024
- Participated in a collaborative community focused on knowledge sharing and discussions rather than traditional teaching. Engaged in weekly sessions covering various techniques and recent topics in AI, contributing to open topics that foster exploration and efficiency

Online Tutor   Oct 2024 – Now
- Conduct online tutoring sessions for over 10 students, focusing on machine learning concepts and applications
- Develop customized lesson plans and materials to enhance student understanding and engagement

Projects

Smart Public Library System   Oct 2024 - Dec 2024

Project Description: Developed and implemented a Smart Public Library System with core functionalities including book management, a chatbot for personalized book recommendations, a real-time recommendation engine, and system performance analysis

Key Components:

Smart Book Recommendation Chatbot: Utilized RAG to provide personalized book suggestions based on user requests
- **Streaming Data Processing:** Integrated Kafka and Quix Stream to collect and process real-time user interaction data
- **Real-Time Book Recommendation Engine:** Leveraged Reinforcement Learning (REINFORCE) and Contrastive Learning to personalize suggestions based on user interactions
- **Data Warehouse:** Designed for storing and analyzing data to evaluate the recommendation engine's performance based on user feedback

Technologies Used:

Backend: Django, FastAPI
- **Database:** PostgreSQL, Redis, SQLite
- **Streaming:** Apache Kafka, Quix Stream
- **MLOps:** Docker, Docker Compose, Apache Airflow
- **Machine Learning:** Contrastive Learning with Triplet Loss, Reinforcement Learning

Skills

Languages: C++, Java, Python, SQL

Machine Learning: MLE, MAP, regression models, decision trees, ensemble methods (Random Forest, AdaBoost, XGBoost), and K-means clustering

Deep Learning: Experienced with deep learning architectures: MLP, CNN, RNN, LSTM, and Transformers

Data Engineering: Basic understanding of data engineering concepts, including ETL pipelines with Airflow, data warehousing, and stream data processing using Kafka