Vira Rithy





rithyvira021@gmail.com



+855 69-625-363 | 95-950-349



Portfolio



@rithyvira



Phnom Penh, Cambodia

喝 PROFILE

Passionate about Data Science, LLMs, GenAl, and Multi-Agent AI Systems, with expertise in machine learning, data analytics, and cutting-edge AI applications. Skilled in extracting insights from complex datasets and delivering impactful solutions. Driven by innovation, collaboration.

EDUCATION

DataU Academy

Data Specialist 08/2023 - 01/2024

Institute of Technology of Cambodia

Bachelor of Engineering (BEng), Data Science 02/2021 - 02/2025

링 CERTIFIED LICENSE

SDOE: DevOps Engineering SalaCyber Show CREDENTIAL IBM AI Engineering Specialization AI Engineering Bootcamp Maven - Al Makerspace SHOW CREDENTIAL 🖥 Machine Learning with Python-From Linear Models to Deep Learning

MITX MicroMasters SHOW CREDENTIAL

REFERENCE

Sout Sombrathna Data Engineer, DataTicon

Phone: +855 96-782-6163

Email: sombrathna.sout@wedatau.org

PROFESSIONAL EXPERIENCE

DataTicon

Al Engineer

02/2024 - Present

- AI Data Analysis "Text-to-SQL, Voice-to-Chart" LLM CHAINLIT РУТНОМ SHOW PROJECT & Built an AI tool using dynamic databases for text-to-SQL and text-to-chart outputs, enabling quick insights and efficient data visualization
- Khmer Speech Recognition "Speech-to-Text EN-KH" PYTORCH HUGGING FACE SHOW PROJECT @ Fine-tuned OpenAI Whisper-Small for KH and EN, achieving a 37% WER. Deployed on Hugging Face with a Gradio-integrated UI.
- Multi-Agent RAG Marketing Content Enhancer" OpenAI LANGCHAIN LANGGRAPH SHOW PROJECT & The Multi-Agent RAG platform drafts, edits, cites, and adapts, ensuring accurate content with future visual and scalable features.
- Machine Learning "Forecasting Cambodia Tourism" ENSEMBLE PYTHON MLFLOW SHOW PROJECT IS: Achieved 97% accuracy in forecasting monthly visitors (e.g., August 2024: Predicted 548K vs. Actual 547K) using an ARIMA-XGBoost ensemble with MLflow tracking.

DataU Academy

Data Specialist 08/2023 - 01/2024

- Data Warehousing: "Global Cyclistic Company" SQL ETL SHOW PROJECT € Transform massive datasets from diverse sources for accessible insights and powerful sales optimization analytics.
- AI-Powered Sales Analysis & Forecasting PYTHON STREAMLIT SHOW PROJECT 63 Developed a sales forecasting solution for Olist using SARIMAX, XGBoost, and LSTM (top performer), integrating Streamlit and Power BI for revenue, stock, and marketing insights.
- Hazard Vulnerability Dashboard POWER BI SHOW PROJECT & Analyzed Cambodia's hazard vulnerability index (2014-2019) at provincial/commune levels, assessing risks from storms, floods, and droughts, with Khmer and English support.

帜 PERSONAL PROJECTS

AI Medical: Personalized Q&A Application

01/2025-Present

NEXT.JS LANGCHAIN PINECONE SHOW PROJECT ©

Developed a medical Q&A app with Gemini, Next.js, Pinecone, and Shadon/ui, leveraging RAG to analyze medical reports and deliver personalized healthcare insights.

Legal AI Risk Management

12/2024-01/2025

QDRANT CHAINLIT SHOW PROJECT &

Created an AI Risk Chatbot to educate 50 teams on AI risks, ethics, and mitigation, fostering responsible AI adoption and cross-team collaboration."

SKILLS

TECHNICAL

PYTHON

Data processing,ML model development, and API integration

NEXT.JS

Skilled in building scalable apps, SSR, SSG, and performance optimization.

DATA WAREHOUSING

ETL (Extract, Transform, Load), Deployment, Job Scheduling for data analysis

Math

Statistics, Probability, Linear Algebra, Probabilistic Graphical Models, Calculus, Numerical Analysis, Discrete Maths

LLMs

Hands-on experience with Prompt Engineering, RAG, Fine-Tuning and Multi-Agent Systems.

INTERPERSONAL

LEADERSHIP

Inspiring others through positive example, effective communication, and collaborative decision-making.

COMMUNICATION

Inspiring others through positive example, effective communication, and collaborative decision-making.

PROBLEM SOLVING

Prioritize analytical thinking, creativity, and a collaborative mindset to find innovative and effective solutions.

BUSINESS CONCEPT

Centers on delivering innovative products/services that address market needs, backed by a commitment to quality, sustainability, and exceptional customer experiences.