Jingxuan li

L +1 4244400024

☑ madili@g.ucla.edu

• 10833 Wilshire, LA, 90024

Candy26i

Education __

BS University of California, Los Angeles, Math of Computation

CA, USA

Sep. 2021 to Jun. 2025

- GPA: 3.98/4.0
- Coursework: Machine Learning, Optimization, Multi-Variable Calculus, ODEs, Real Analysis, Complex Analysis, Advance Programming in C++, Statistics, Numerical methods, Probability theory, Math Modeling, Computer Graphics, Linear Algebra.
- Honors: UCLA the Oda Abe **Scholarship** (2024), Dean's Honors List (2021, 2022, 2023, 2024)

Publications

Quantifying Preferences of Vision-Language Models via Value Decomposition in Social Media Contexts 🗹 Jingxuan Li, Yuning Yang, Shengqi Yang, Linfan Zhang, Ying Nian Wu

Under Review

Research Experience _

UCLA, Researcher on VLM's latent and induced persona, Advisor: Prof. Ying Nian Wu

CA, USA Sep. 2023 to now

- · Developed an automated GUI-based pipeline to extract data from social media platforms, including screenshots, metadata, and other relevant information. Data was processed and stored in a backend system using PostgreSQL and AWS S3 for scalable and efficient management.
- Designed benchmarking approaches leveraging the curated social media datasets to investigate latent personas of Vision-Language Models (VLMs).
- · Processed image data through CLIP to generate embeddings, which were stored in Milvus, enabling fast and scalable vector-based similarity searches.
- Developed prompting strategies in **inducing VLM's personas** and evaluating their performance utilizing social media's recommendation system.

Internship Experience _

Tencent, Big Data Researcher, Intern (CSIG - Cloud & Smart Industries Group)

- · Conducted research on geolocation optimization, utilizing NLP methods such as jieba and **ckip-transformers** to match WiFi-SSID and store names for precise geolocation.
- Fine-tuned the HunYuan-7b model on a constructed dataset, achieving enhanced accuracy for geolocation tasks.
- Designed and implemented a pipeline integrating the matching algorithm into Tencent Maps, significantly improving geolocation accuracy in industrial applications.

Tencent, Technical Researcher, Intern (CSIG - Cloud & Smart Industries Group)

- Designed and implemented mathematical algorithms to detect inconsistencies in apartment geological data, ensuring data accuracy.
- · Optimized algorithm efficiency in Python, reducing time and space complexity to enhance system performance.

Beijing, China Aug. to Sep. 2024

Beijing, China Jul. to Sep. 2023

Projects _

COVID-19 and Travel Pattern

Nov. 2024

- Discovered connections between Travel patterns and COVID-19 case trends
- Written data critique and constructed a narrative on how different state's travel restrictions and policies interplay with the spread of influenza
- Created a Website on Word Press with Data Visualization using Tableau and Time JS

Population Model for Dragon

Nov. 2024

- Developed a population growth **model** for dragons using a modified Lotka-Volterra method.
- Solved the system of Ordinary Differential Equations (ODEs) to simulate predator-prey dynamics and tuned the **parameters** to make the model practical.

CNN on Image Classification

Feb. 2024

- Developed a Convolutional Neural Network (**CNN**) system using **ResNet** architecture to perform character identification in the animated series "The Simpsons," achieving high accuracy.
- Utilized **PyTorch** to implement the algorithm for model training and evaluation.

Logistic Regression on Wine Recognition

Jan. 2024

- Compared **Stochastic Gradient Descent**, Mini-batch Gradient Descent, and regular Gradient Descent methods for logistic regression in wine classification, optimizing step size for improved convergence.
- Utilized **scikit-learn** to implement the logistic regression algorithm and evaluate performance.

Skills

C++, Python, JavaScript, HTML, SQL, PostgreSQL, AWS, Prisma, Milvus, Tableau, ይፒርX, Scikit-learn, TensorFlow, Keras, PyTorch, Pandas, NumPy, Matplotlib, Linux, Visual Studio, XCode