**Zhenyu Zhang**

Phone: +1 (860) 234-7101 | Email: [Zhang.zhenyu6@northeastern.edu](mailto:Zhang.zhenyu6@northeastern.edu) | [Linkedin Profile](http://www.linkedin.com/in/振宇-张-7856b0332) | [Github](https://github.com/zzy0816)**Career Goal**

Applied Machine Intelligence with solid experience in **Machine learning, Data Analysis**, **Data Science**, and software development. Seeking roles in those and others AI-related fields.

**Education**

*Northeastern University* **| Master of Professional Study** in Applied Machine Intelligence | Boston, MA | April 2025 | GPA: 3.9/4.0

*University of Connecticut* | Bachelor of Art *|* Storrs, CT | May 2022**Skills**

Languages & Tools: Python, SQL

Frameworks & Libraries: **TensorFlow**, **Pytorch**, Scikit-learn, **Pandas**, Seaborn, Langchain

Platforms & Tech: Ollama, Hugging Face, Tableau, Redis, MongoDB

**Work Experience**

*New York Technology & Management LLC | Programming Manager | New York, NY | May 2025 – Present*

* Built React multi-agent system with LangChain to improve data-driven sales workflows.
* Leveraged Ollama for data analysis and automated PPT reports, enhancing reporting efficiency.
* Built modeling of Personalized News Recommendation System with multi-channel recall / rank.
* Improved user engagement and click-through rate through personalized recommendations.

*Yangtze River Consulting Service LLC* ***|*** *Ethical Consultant | Piscataway Township, NJ | Sep 2022 – Jul 2023*

* Applied regression in Boston Crime Analysis, improving risk assessment efficiency by 10%.
* Led COVID-19 time series and vaccine survey analysis, covering cleaning, EDA, and modeling.

Conducted **RFM analysis** and developed a clustering model for customer segmentation.

**Projects**

Personalize News Recommend System

* Built a recommendation system with **multi-channel** recall (CF, etc.) and ranking (DeepFM, etc.).
* Utilized MongoDB, Redis, and Kafka for efficient data storage, caching, and processing.
* Applied Optuna and stacking fusion, improving AUC 0.88, loss 0.09, HitRate 0.51 / NDCG 0.67.
* Increased recommendation CTR to 12% and overall clicks by 15%, boosting user engagement.
* GitHub: [News-RS](https://github.com/zzy0816/bbc_rs).

Crypto Predicted and Analysis with Vester AI

* Built a Crypto analysis tool with **transformer model** and LLM for Realtime market prediction.
* Collected Bitfinex API data, trained transformer models with historical data for short-term forecast.
* Used metal model to stack transformer model and sentiment model to get **84% accuracy**.

COVID-19 Comorbidity Data Analysis and Forecasting

* Analyzed global COVID-19 data to forecast case trends and support decision.
* Cleaned CDC dataset, performed EDA, and built regression models including RF and GBM.
* Achieved a forecasting **RMSE of 2.6391**, providing accurate trend predictions.
* GitHub: [COVID-19-Death](https://github.com/zzy0816/COVID-19-Death).