

# XINXING WU, PH.D.

Applied Scientist | AI Data Scientist | Machine Learning Engineer ([Authorized to work in USA](#))

**GitHub** — <https://github.com/xinxingwu-uk> **HomePage** — <https://xinxingwu.github.io>

**Phone:** [617-259-6772](tel:617-259-6772) **Lexington, KY** ([Open to relocate](#)) **E-mail:** [xinxingwu@gmail.com](mailto:xinxingwu@gmail.com)

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Developed and open-sourced ML algorithms (**NeurIPS/AAAI/IJCAI**) adopted in multiple applied analytics pipelines; Expert in feature selection, deep learning, GNNs, survival analysis, algorithmic stability; recently on LLM. Building reproducible Python pipelines and dashboards end-to-end that drive decisions. Strong in problem scoping, modeling, evaluation, and clear stakeholder communication.

## TECHNICAL SKILLS

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- **ML & Stats:** feature selection, deep learning, GNNs, survival analysis, algorithmic stability, anomaly detection, ensemble learning, multimodal learning, model design and evaluation, LLM Finetuning, etc.
- **Data & Visualization:** Pandas, NumPy, Matplotlib, Seaborn; dashboards (Plotly/Streamlit), SQL.
- **Libraries:** TensorFlow/Keras/PyTorch, Scikit-learn, Transformers, SciPy, Scrapy, Gradio, etc.
- **Programming:** Python, R, Java, C#, Ruby; React/React native; PHP, JavaScript, etc.
- **Workflow:** GitHub, JupyterLab/PyCharm, Power BI/Tableau, Linux, GPU training (TACC; Colab)
- **Certifications:** Red Hat Certified Engineer (RHCE); Red Hat Certified System Administrator (RHCEA)

## SELECTED PROJECTS - OPEN SOURCE

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- **FAE** - Fractal Autoencoders for Feature Selection (AAAI'21). Tensorflow+Keras: [Repo](#)
- **UFS** - Stability & Generalization for Unsupervised Feature Selection (NeurIPS'21). [Repo](#)
- **DGAE** - Deep Graph Neural Network for Link Prediction (IJCAI'22). [Repo](#)
- **AD\_Survival** - DeepSurv pipeline for clinical survival analysis. scikit-learn: [Repo](#)
- **SSVA** - Singing Syllabi with virtual avatars (2025). LLMs: [Repo](#)      **JS Projects** - [Repo](#)

## EXPERIENCE

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**External Experts Program at Amazon MTurk (Part-time),** 2025 - Present  
Designed challenging math/analysis tasks to probe LLM reasoning; created rubrics and analyzed failure modes; suggested model improvements.

**Assistant Professor at Midway University, Kentucky, United States,** 2023 - 2025  
Conducted applied research translating to open-source repositories and classroom adoption, such as Singing Syllabi with virtual avatars. Designed and delivered practice-oriented ML projects.

**Principal Investigator at Shanghai Threebio Technology Co., Ltd. (Part-time), Shanghai, China,** 2016 - 2018  
Build demand-forecasting and statistical computing pipelines from historical purchase data; delivered actionable insights to product.

**Algorithm Engineer at Shanghai Advanced Research Institute of CAS, Shanghai, China,** 2012 - 2013

Implemented high-throughput algorithms on many-core (Tilera); optimized data-parallel performance in Python/C-adjacent environments

**Algorithm Developer at Shanghai Alcatel Network Support Systems Co., Ltd., Shanghai, China,** 2011 - 2012

Developed analytics features using Java/SQL; collaborated with platform engineers to integrate algorithms into production services

## EDUCATION

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- Postdoctoral Scholar, ML & Data Analysis - University of Kentucky, United States, 2019 - 2022
- Visiting Researcher, ML - Boston University, United States, 2018 - 2019
- Ph.D., Computer Applications Technology - East China Normal University, China, 2007 - 2011