

# Jingyuan Liu

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## EDUCATION

**Boston University**, Faculty of Computing & Data Sciences

September 2024 – January 2026

Major: Master of Data Science, Cumulative GPA: 3.71/4.0

Course: Tools for Data Science (4.0), Data and Ethics (4.0), Topics in Data Science Methodology (4.0).

**University of International Business and Economics**, School of Information Technology & Management

Major: Data Science and Big Data Technology, Cumulative GPA: 3.47/4.0. September 2019 – June 2023

Course: Python (4.0), Machine Learning and Data Mining (4.0), Big Data Analysis (4.0), Matlab Application (3.7).

## INTERNSHIP

**Just Horizons Alliance (JHA), Research Assistant**

June 2025 – Present

- Co-developed an ethics-oriented LLM benchmark (AIEI), inspired by HELM, using a hierarchical tree-based design to assess model behavior across ethical, transparent, fair, safety, etc. dimensions.
- Designed evaluation criteria and scoring mechanisms, constructed new dataset and introduced a temperature-based multi-level testing to capture creativity variance and improve score richness.
- Implemented end-to-end evaluation pipelines across multiple model environments, conducting systematic testing and automated scoring on local LLMs (e.g., LLaMA) and API-based systems (e.g., Gemini).

**Institute of Automation, Chinese Academy of Sciences**

September 2023 – March 2024

**Research Assistant on an NLP-centric MultiModal Biological Experiment Agent**

- Crawled over 20,000 protocols from journal websites using BeautifulSoup and performed EDA, visualizations of data demographics using pandas, matplotlib, and seaborn.
- Customized a protocol generate agent using LangChain framework with few-shot learning for prompt design.
- Built a KBQA System leveraging markdown-formatted data, Faiss and keywords embedding for recall rate.

## PROJECTS

**How do Terms of Service Influence Social Media User Dynamics**

March 2025 – January 2026

- Integrated Value Sensitive Design and Social Amplification of Risk Framework to study how platform policy changes are translated into collective responses, formalizing privacy anxiety as an intermediate.
- Collected and analyzed 3 months of social media metadata and Terms of Service updates, applying LLM-assisted textual analysis and topic modeling to track policy-driven shifts.
- Compared risk metrics (e.g., Risk–Nonrisk Engagement Ratio = 3.77, showing privacy-risk content received 4× higher engagement), and visualized using time-series plots, bar charts, and diffusion diagrams.

**Bias Detection in Social Media Content**

September 2024 – May 2025

- Deployed Azure data architecture using Azure Resource Manager, creating resources and building batch (SBIC) and hourly streaming (Bluesky API) ingestion pipelines within a medallion architecture.
- Trained a BERT-based classifier for gender/racial bias detection on batch data with an average accuracy of 88.62%; implemented Azure Functions and Azure ML endpoints for real-time inference on streaming data.
- Developed interactive PowerBI dashboards for batch and streaming data with 6-hour refresh cycles, cross-report capability, and Key Influencer visuals, enabling near real-time insights and demographic analysis.

## SKILLS

**Programming:** Python (NLP, Web-scraping, Scikit-learn, Matplotlib, Seaborn), MATLAB, R, Java, C++, SQL.

**Software:** Tableau, Power BI, Azure, Gephi, Vensim, UBOT, Google Looker Studio.