

NATE HU

Atlanta, GA | Tel: (434) 227-1447 | Email: nate.hu@emory.edu

EDUCATION

EMORY UNIVERSITY, COLLEGE OF ART AND SCIENCE

Atlanta, GA

Double Major: Data Science & Computer Science GPA: 3.99/4.0 (Cumulative); 4.0/4.0 (Major)

Aug 2022 – Present

Dean's List of Emory College of Arts and Sciences

- Relevant Coursework: Probability & Statistics; Linear Algebra; Regression Analysis; Machine Learning; Discrete Mathematics; Data Structure and Algorithm; Machine Level Programming

WORK EXPERIENCE

YSTen Technology Co., Ltd.

Beijing, CN

Data Intelligence Internship

May 2023 – Jul 2023

- **Metrics Design and SQL Optimization:** Designed and implemented key performance metrics (URNAU, MANU) using Python, optimized SQL queries for viewership and active users, reducing computing time by 21% and memory usage by 15%
- **Data Analysis:** Conducted deep dive research on user development analysis, viewership analysis, and value-added subscription on a large dataset for Beijing of TV viewership and user activity; synthesized data and presented insights to the leadership team
- **Data Visualization:** Created visually appealing and informative dashboards using Power BI, presenting complex data insights in a user-friendly format, resulting in improved data communication and informed decision-making by stakeholders

HireBeat Inc.

Jersey City, NJ

Data Analysis Internship

Feb 2023 – Apr 2023

- **Regression and Trend Analysis:** Undertook a thorough analysis of the JOLTS and CES databases from the BLS website, extracting insights and making predictions on employment demand trends across U.S. industries to inform business and strategic planning
- **User Engagement Analysis:** Conducted comprehensive data analysis utilizing BigQuery to assess data from Google Analytics to analyze website visit patterns such as geographical distribution and user interactions to optimize user experience, resulting in an 18% surge in website traffic and 8% revenue growth over the last month
- **Data Intelligence:** Employed Microsoft Excel and BigQuery to dissect job vacancy data and employee metrics, pinpointing industries with soaring talent demands; gave recommendations on the company's market positioning and outreach strategies

RESEARCH EXPERIENCE

Future Intelligence Lab, Tsinghua University

Beijing, China

Research Assistant

Jun 2024 – Present

- Contributed to the development of the *Analyze-Abstract-Infer (A2I) Workflow* using Python and prompt engineering to enhance the reasoning capabilities of LLMs in the preprint paper: **LIMP: Large Language Model Enhanced Intent-aware Mobility Prediction**
- Developing framework for edge-cloud LLM collaboration, implementing task decomposition and dependency graph construction that reduced reasoning time by 66% and API costs by 83% compared to baseline methods, co-authored paper accepted by WWW 25': **Division-of-Thoughts: Harnessing Hybrid Language Model Synergy for Efficient LLM Reasoning**
- Designed and implemented task decomposition, dependency construction, and graph construction for performance optimization

Quantitative Theory & Method Department, Emory University

Atlanta, GA

Research Assistant

Sep 2023 – Present

- Utilized Python to extract words from StackExchange posts from 2014 to 2022, applying regression and probability analyses to study trends in word popularity and track the evolution of buzzwords over the years
- Collected and preprocessed data from the Webis Gmane Email dataset, removing irrelevant emails and performing initial syntactic analysis to identify structural patterns. Aims to differentiate between machine-generated and human-written emails

LEADERSHIP

AI.Data Lab at Emory University, TechBridge Dashboard Development

Atlanta, GA

Team Leader

Sep 2024 – Dec 2024

- Developed donor performance metrics dashboard using Python and Tableau to analyze retention rates and geographic distribution, providing actionable insights that identified a 65% donor retention rate despite declining total donations
- Led data preprocessing and standardization of 1000+ warehouse entries, implementing geolocation mapping and similarity scoring algorithms that improved data accuracy for donation tracking
- Conducted comparative analysis of pre vs post-COVID donation patterns across Georgia counties, revealing key regional gaps and recommending targeted outreach strategies to rebuild South Georgia donor network

ADDITIONAL INFORMATION

- **Technical Skills:** Python, Java, SQL, PowerBI, Tableau
- **Analytical Skills:** Natural Language Processing, Modeling, Data Mining, Data Cleaning, Visualization and Forecasting
- **Interest:** Tennis, Basketball, Piano