Jiechen Li

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EDUCATION

Duke University   **Durham, NC**

MS in Interdisciplinary Data Science; GPA: 3.9/4.0   *Graduation Date: May 2025*

- <u>Relevant Courses</u>: AI Security and Privacy, Principles of Machine Learning, NLP, Calculus and Probability
- <u>Honors & Awards</u>: MIDS Scholarship of 20% Tuition Discount; Dean's Research Award for 2024

University of Rochester   **Rochester, NY**

MS in Teaching English to Speakers of Other Languages; GPA: 3.9/4.0   *Graduation Date: July 2016*

- <u>Relevant Course</u>: Master's Research Methods (Quantitative & Qualitative)

Inner Mongolia Agricultural University   **Hohhot, China**

BA in English; GPA: 3.1/4.0   *Graduation Date: July 2013*

- <u>Relevant Courses</u>: Advanced Math, Linear Algebra, Basics of Computer Engineering, VB Programming, C Programming

RESEARCH EXPERIENCE

Master's Capstone Project, Duke University   **Durham, NC**

Climate TRACE: Estimating Global Greenhouse Gas Emissions from Buildings   *August 2024 - May 2025*

- Created a scalable machine learning model predicting buildings' Energy Use Intensity (EUI) using limited satellite, climatic, and socioeconomic data.
- Improved model performance by 54% over baseline, providing a valuable tool for data-driven emissions estimation and supporting more effective emission reduction strategies.

Privacy and Security of HCI, Duke University   **Durham, NC**

InSPIRe Lab: Privacy and Security of AI-enabled Social Chatbots   *May 2024 - December 2024*

- Conducted comprehensive literature review, obtained IRB approval, and developed a qualitative codebook for analyzing privacy and security in AI-enabled social chatbots.
- Performed quantitative power analysis and Cumulative Link Mixed Models (CLMM) to analyze data collected via Qualtrics.

Master's Thesis, University of Rochester   **Rochester, NY**

Educational Technology Enabling Non-native English Teachers to Succeed in ESL Contexts   *January 2016 - June 2016*

- Synthesized the existing literatures to investigate the potential effects of educational technology on non-native English teachers and their teaching in ESL contexts.
- Found that educational technology provides realistic pathways to support non-native English teachers in this context.

Quantitative & Qualitative Research, University of Rochester   **Rochester, NY**

What is the Role of the University of Meeting International Students' Need: A Mixed Method Research Study of the University of Rochester   *January 2015 - March 2015*

- Critiqued quantitative and qualitative research to acquire the appropriate rationale to conduct my research.
- Conducted semi-structured interviews within Warner Education Graduate School, analyzed interview transcripts, and authored an essay on findings related to international students' needs.

Graduation Design, Inner Mongolia Agricultural University   **Hohhot, China**

Analysis of Transcendentalism in Walden   *March 2013 - June 2013*

- Analyzed the book, *Walden,* through the lens of transcendentalism and illustrated the author's call for returning to nature and simplicity.

PROJECTS

Global Semi-finalist of Microsoft's Imagine Cup 2024   **April 2024**

AI Companion Robot BunnyBot

- Developed an award-winning healthcare companion robot using Raspberry Pi, Azure, and OpenAI APIs.
- Leading product management data pipeline and API software development, while collaborating with cross-functional teams to ensure successful project implementation, and timely delivery.

Data Engineering Project, Duke University   **December 2023**

Deploying Flask Apps to Azure Web App via Docker Hub

- Developed a Python-based Flask book recommended system to Azure and load the test with Locust.
- Managed Docker Hub and Azure deployment, co-authored [GitHub repositories](), contributed to [Microsoft blog]() publications, and received [recognition from Microsoft's Principal Cloud Advocate team]().

Beginner Award of Generative AI Hackathon, Duke University   **November 2023**

AI Language Learning Product "TalkwithMe"

- Developed a customized [AI-powered English learning tool]() using Azure's Text-to-Speech and Pronunciation Assessment APIs.
- Invited to author a [Microsoft blog]() post with my account, showcasing the innovation behind my product.

WORK EXPERIENCE

Yongxiang Renewable Energy Technology Co., Ltd.   **Hohhot, China**

Analyst   *September 2021 – May 2023*

- Leveraged **Python** to create and manage sales ROI dashboards, incorporating key statistics and trending analysis, which led to a 3.3% reduction in customer issues and a 2.8% increase in GMV growth.
- Coordinated and collaborated with other departments, such as engineering and marketing, to lead product training for the sales team.

Happy Seed Education Technology Co., Ltd.   **Shanghai, China**

Product Analyst   *April 2021– August 2021*

- Successfully implemented the new Shared Services Platform (0-1-N), resulting in a 60% increase in collaboration efficiency.
- Identified product problems using data analyzing and collaborated with the Scrum product manager and engineers to complete the iteration while supporting backend engineers in creating and managing the API interface document description.

Haoxue Education Technology Co., Ltd.   **Hangzhou, China**

Product Analyst   *July 2020– March 2021*

- Successfully lead a new WeChat Mini Program learning product (0-1-N), resulting in a 100% increase in profitability, and monitored the acquisition, retention rate, and conversion rate which grew 26% month-on-month.
- Completed in-depth analyses for all Chinese online education brands and participated in a **SEO**-specialized market promotion strategy which resulted in an over 85% repurchase rate for the sales team.

Nanjing Unilingo Language Consultation LLC   **Nanjing, China**

Startup Founder   *July 2019 – June 2020*

- Spearheaded new customer channel developments and negotiations and had exclusive translation collaboration with the Jiangsu Grand Theatre.
- Established and managed a 4-person team to cover product frontend, backend, and testing activities to meet the estimated goal, and broke even for 6 months prior to the pandemic.

Shanbay Education Technology Co., Ltd.   **Nanjing, China**

Education Business Analyst   *June 2017 – June 2019*

- Successfully collaborated with a 7-person team to release the product with 50,000+ registered users.
- Collected, compiled, and translated product data into easily digestible reports, and coordinated with the team manager to wrangle and analyze the data through **SQL** and **Python**.
- Assisted in developing product metrics to help increase user satisfaction and productivity metrics over target.

Frontiers Academy   **Costa Mesa, CA**

Chinese Instructor   *October 2016– January 2017*

- Supervised the progress of 2–6-year-old students with their spoken Chinese.

Tonsheen Fly Academy   **Irvine, CA**

ESL Instructor   *August 2016– October 2016*

- Designed and implemented the Adult Survival English program, combining various English teaching methods and techniques, to assist new ESL students, resulting in a 100% retention rate and a 20% increase in test scores.