

MANDI NIU

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EDUCATION

Carnegie Mellon University

Pittsburgh, PA

Bachelor of Science in Information Systems, double-major in Statistics and Machine Learning, minor in Game Design

Dec 2027

Relevant Coursework:

Principles of Imperative Computation, Application Design and Development, Introduction to Machine Learning

GPA: 3.60/4.00

DATA RELATED EXPERIENCE

Research Assistant

Pittsburgh, PA

Ad Blocking and User Behavior Research, Carnegie Mellon University

Dec 2024 - Present

- Managed the end-to-end participant process for an experimental study involving over 1,200 participants, analyzing the impact of ad-blocking and anti-tracking technologies on user behavior.
- Conducted rigorous testing and analysis of website merchant classification using tools such as DataGrip and SQL.
- Collected and organized extensive datasets, leveraging Excel for data cleaning and analysis to support the study's objectives.

Discord Database Lifecycle Project

Pittsburgh, PA

Nov - Dec 2024

- Crafted user stories to address customer pain points for the company Discord
- Developed a conceptual Entity-Relationship model to capture the necessary data model for business operations and transformed it into normalized relations using BCNF
- Built a database schema using PostgreSQL that fulfilled user stories and supported business functionality

Carnegie Involvement Association (CIA Buggy)

Pittsburgh, PA

Mechanic, Data Team Member

Sep 2024 - Present

- Conducted weekly maintenance and safety checks on a high-speed, human-powered racing vehicle (buggy) to ensure optimal mechanical performance and driver safety during test runs
- Collaborated with the data team to analyze data collected from RTK (Real-Time Kinematic) kits, providing insights to improve buggy design and race performance, and presented findings using SQL queries and interactive web interfaces

LEADERSHIP & PROJECT EXPERIENCE

Student Taught Course (Stuco)

Pittsburgh, PA

Course Instructor

Jan 2025 - Present

- Teach weekly 50-minute lectures on Greek mythology, sharing expertise and passion for the subject with a class of ~15 peers.
- Develop engaging course content, including lecture materials, interactive activities, and assessments.
- Manage all aspects of course preparation, including lesson planning, research, and content delivery, fostering an interactive and informative learning environment.

Term Project 112 - Cat Milk

Pittsburgh, PA

Nov - Dec 2023

- Designed and developed a platformer game similar to Mario focused on game logic, physics, and player experience
- Implemented level creation functionality with user-friendly drag-and-drop mechanics, where players can progress through levels or create custom stages by dragging and adding interactive components, enhancing player creativity and engagement
- [Watch Demo](#)

WORK EXPERIENCE

Plus Tutoring - Carnegie Mellon University

Remote

Math Tutor

Sep 2024 - Present

- Provided weekly math tutoring sessions to ~20 high school students, improving understanding and problem-solving skills

Xi'er North America Culture

Shenzhen, China

English Teacher & Content Manager

Jun 2024 - Aug 2024

- Managed the official WeChat account with an audience of 300+ parents, wrote articles regarding studying in the US, taught lessons on TOEFL, IELTS, and SAT, and helped construct curriculum and textbooks for TOEFL, IELTS, and SAT prep

RELEVANT SKILLS

Programming Languages: Python, Ruby, R, Java, C, SQL, HTML, CSS, MongoDB

Data Analysis: Statistical analysis, data visualization, reporting with R

Languages: Fluent in English and Mandarin, elementary proficiency in Japanese