

Wataru Ishihara

wataruishihara203@gmail.com | (669) 356-2340

PROFESSIONAL EXPERIENCE

Data Science / Project Management Intern – Reazon Holdings (“menu” Food Delivery App)

Tokyo, Japan | July 2025–Sept 2025

- Developed user segmentation pipeline using Word2Vec embeddings and neural clustering (K-means + NN features), identifying high-value cohorts (e.g., “Gourmet Explorer”) and increasing first-time user purchase rate by 15%
- Analyzed first-session behavior with SQL/DuckDB and Python, discovering predictive paths that increased retention and influenced product design.
- Presented findings directly to CEO, AI/Data Science teams, and senior leadership, shaping company strategy on user retention.
- Led cross-functional coordination with engineers and designers to translate analysis into user-facing feature improvements.

Demonstrated: Project coordination, communication, cross-functional teamwork, adaptability, initiative, technical analytics

Bilingual Interpreter - UC Davis Continuing and Professional Education

Davis, CA | Sept 2022–June 2025

- Delivered real-time Japanese ↔ English interpretation for lectures and materials in a mini MBA program, ensuring smooth communication between instructors and students.
-

RESEARCH EXPERIENCE

Undergraduate Research Assistant – Computational Physics

University of California, Davis | Sept 2024 - June 2025

- Simulated phase transitions in Ising models using Monte Carlo methods and the Metropolis algorithm.
- Developed Python scripts for statistical sampling and spin configuration analysis.
- Analyzed temperature-dependent behavior, identifying critical points and phase transitions.

Skills: Python, Monte Carlo methods, Metropolis algorithm, thermodynamics, data analysis

PROJECTS

User Segmentation via Word2Vec (Reazon Holdings, Internship) - Implemented Word2Vec-based embeddings and clustering to segment food delivery users, identifying high-value “Gourmet Explorer” cohort and presented insights to CEO + data science teams, shaping retention strategy.

Transformer Language Model - Implemented a Transformer-based language model from scratch in PyTorch, including multi-head attention, positional encodings, and feedforward blocks. Trained the model on Wikipedia text data to generate coherent sequences, demonstrating understanding of deep learning architectures beyond libraries.

Gained hands-on experience with neural network design, backpropagation, and optimization techniques.

Clothing Type Classification - Developed a machine learning model using PyTorch to classify types of clothing from images.

Model Architecture: Designed and implemented a convolutional neural network (CNN) for image classification.

Technical Skills: Proficient in Python, PyTorch, data preprocessing, model training, and performance evaluation

EDUCATION

University of California, Davis | Computational Physics Major B.S. | Sept 2021 - June 2025

SKILLS

Programming & Data: Big Query, Python, PyTorch, SQL, Pandas, NumPy, SciPy, MATLAB, MATLAB image processing toolbox, C, C++, ORM-based databases, MySQL, Entity Framework, OpenCV

Machine Learning & AI: Deep Learning, Transformers (built in PyTorch), Word2Vec Embeddings, Neural Networks, CNNs, Data Preprocessing, Model Training & Evaluation, Scikit-Image,

Data Analysis & Visualization: Statistical Analysis, Monte Carlo Methods, Experiment Design, Matplotlib, Seaborn

Tools: Excel, Microsoft Office, Vercel, GCP, Git, Onshape (CAD), Adobe Photoshop, Premiere Pro

Languages: Japanese (Native), English (Native), Korean (Conversational)