LINGUO REN

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EDUCATION

Bowdoin College, Brunswick, ME

Expected May 2025

B.A. in Computer Science and Mathematics, Minor in Education, GPA: 3.7/4.0

Coursework: Advanced Data Science, Financial Machine Learning, Deep Learning & Computer Vision, Mathematical Reasoning, Probability, AI Ethics, Cognitive Architecture, Japanese Politics, United States-China Relations, Jazz Combos, Photography

Grua/O'Connell Award (2023): Undertook an 800-mile bikepacking journey along the East Coast Greenway, exploring the impact of social privilege on greenway usage by connecting with local cyclists for overnight stays and interviews; featured in *The Quoddy Tides*

WORK EXPERIENCE

Pinestone Asset, Shanghai, China

July 2024 – August 2024

Ouantitative Researcher

- Consolidated 7+ million entries of stock market indices (CSI 300 and SSE 50) from 3 vendors into a unified 20-year dataset using Pandas and NumPy, informing market strategies and reducing overhead computation time for related projects by 20%
- Resolved hundreds of abnormal data points by conducting historical research while documenting the data cleaning process to ensure transparency, reproducibility, and consistency
- Simplified data analysis by developing a Python-based time-interval slicing tool to augment dataset with customizable timeframes, generating descriptive statistics to uncover actionable insights for advanced trading strategies
- Enhanced the company's Python-based visualization tools by expanding support for diverse data inputs, introducing intuitive debugging warnings, implementing dual y-axis charts to compare variables with distinct units (e.g., volume vs. price), and optimizing color contrasts and spacing to improve aesthetics and clarity

Sealand Securities, Shanghai, China

June 2023 – August 2023

Data Analyst

- Preprocessed trading data from vendors using SQL and Pandas, curating market briefings and generating analytics datasets
- Certified in IBM's Data Science Specialization (10-course series), focusing on data wrangling, cleaning, visualization, report writing, and hands-on experience with Python libraries, machine learning models, and techniques

Academic Technology & Consulting, Bowdoin College, Brunswick, Maine

May 2022 – September 2022

Canvas Migration Project Assistant

- Reviewed the accuracy and accessibility of 1,500+ courses on a new campus-wide Learning Management System (LMS)
- Identified and resolved accessibility issues by implementing OCR-compliant PDFs to meet the college's accessibility standards, improving content accessibility and inclusivity for 2,000+ users

Residential Life, Bowdoin College, Brunswick, Maine

May 2023 - Present

Proctor

- Facilitate 50+ dinners and reflective conversations on social justice, violence prevention, and mental well-being, fostering an inclusive environment that empowers 30 first years to grow and engage actively in the community
- Mediate conflicts between residents by promoting active listening, open communication, and collaborative resolutions
- Conduct interviews with deans to select qualified candidates for leadership roles in the College Houses and Residential Life

Howell House (Formerly "Alpha Delta Phi Society"), Bowdoin College, Brunswick, Maine

August 2022 – June 2023

- Programming Chair
 - Managed a \$6,000+ budget to implement inclusive programs such as a Friendsgiving dinner for students unable to travel home, a Halloween "Haunted House" event for children in Brunswick area, and a Tea & Stitch session during reading period
 - Collected feedback from sophomores to develop career, wellness, and entertainment initiatives in collaboration with Residential Life, student government, and deans, hosting events like a spikeball tournament and a gala to build class identity

PROJECTS AND SKILLS

Abnormality Detection in Stock Market with Unsupervised Learning

April 2024 – May 2024

Project Link

- Extracted compressed latent representations of high-frequency trading data using Temporal Convolutional Network Autoencoder, preserving temporal dependencies and reducing data dimensionality for anomaly clustering and detection
- Grouped trading behaviors based on similarities by applying hierarchical clustering algorithms to encoded representations and visualized the results using dendrograms

Technical Skills:

Proficient in: Python (Pandas, NumPy, Scikit-Learn, Matplotlib, Seaborn, PyTorch, NLTK), R (Tidyverse, ggplot2), Java, SQL Exposure to: Stata, LaTeX, HTML, CSS, JavaScript, React, C, Git

Languages: Chinese (Native), English (Bilingual Proficiency), Spanish (Intermediate)

Hobbies: Rowing, Cycling, Ice Hockey, Running, Nordic Skiing, Lacrosse, Day Hike, Jazz Band