Nuo Wen Lei

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EDUCATION

Brown University, 4.00/4.00 GPA   Providence, RI | **Expected Graduation May 2026**
Bachelor of Science in Computer Science
Relevant Courses: Intro to Software Engineering, Computer Vision, Honors Statistical Inference, Data Engineering, Machine Learning, Hands-on Data Science
Organizations: Entrepreneurship Program Tech Team, Brown Machine Intelligence Community (B-MIC)

COMPUTER SCIENCE SKILLS

Programming Languages: Python, Javascript, Typescript, R, Java, HTML/CSS, SQL
Frontend Frameworks: React, React-Native, Bootstrap, Tailwind, Next.js
Backend Frameworks: Django, Flask, FastAPI, Firebase, Amazon EC2
Machine Learning/Data Science: TensorFlow, Keras, NumPy, SciPy, Scikit-Learn, Pandas, NLTK, SpaCy, Google Cloud Services, Amazon Sagemaker
Database: MongoDB, PostgreSQL, Amazon Web Services (AWS), Amazon S3, MySQL, SQLite, Firebase
Projects: BearBarters - Online Second-hand Bartering Market, Covid Death Trend Analysis, Cubby - Friend Group Matcher, Mask Detection Web App, Political Donation Analysis Website, Shanghai Property Analysis Website, Wang Wang, FireFly

COMPUTER SCIENCE EXPERIENCE

QuantGuide, *Founding Engineer* | React, Nextjs, Firebase   Virtual | May 2023 – Nov 2023
- Developed the website using React with Nextjs, which directly impacts the online experience of 7000+ users and became backed by Y Combinator (YC)
- Integrated Firebase to respond to all content queries and record all user interactions with the website, including profile changes, likes and dislikes, and question notes, which sums up to more than 1 million reads and writes per day
- Built an auto-generating mental math practice game that has been played for 16000+ times

Numerai, *Software Engineering Intern* | Python, AWS Sagemaker   San Francisco, CA | Jun 2023 – Aug 2023
- Implemented a pipeline in AWS Sagemaker using Python that allows for rapid experimentation of various machine learning model configurations for alpha predictions
- Backtested and documented 200+ model configurations to optimize for Sharpe Ratio while minimizing Churn Rate, Market Exposures, and other risk metrics
- Proposed and validated a new metric for 2000+ users to measure the uniqueness of their alpha submissions based on correlation to other users
- Deployed a machine learning model that has a 22% higher Sharpe in backtest than the previous model into production with more than $100 million in Assets Under Management
- Engineered and backfilled internal data metrics to evaluate market risks of machine learning models

ORGANIZATION EXPERIENCE

Brown Entrepreneurship Program - Tech Team, *Member* | React, Firebase   Providence, RI | Oct 2022 – Current
- Designed responsive landing and profile pages with React and integrated Firebase database and storage for the Bruno Ventures project, which aims to connect current students with startup opportunities from alumni
- Met and discussed with stakeholders for the Bruno Ventures project to understand user stories and needs

Brown Machine Intelligence Community, *Executive Board* | Python, TensorFlow   Providence, RI | Oct 2022 – Current
- Worked with 10 other members in the Teaching and Content team to designed workshop development and workshop hosting cycles for B-MIC Artificial Intelligence project-based workshop
- Pitched and developed ideas for the first ever workshop project, named "Building and Training a Baby ChatGPT"
- Directed and developed the second workshop "AI Art Workshop" as the designated project leader
- Taught 100+ students high-level topics of Generative Pretrained Transformers for language modeling and Machine Learning model training practices with the rest of the Teaching and Content team
- Led and taught 60+ students high-level topics of Neural Style Transfer for art image processing with the rest of the Teaching and Content team

SKILLS & INTERESTS

Technical Applications: Microsoft Office Excel, PowerPoint, Google Drive, Google Sheets, Google Docs, Google Colab
Language: Bilingual proficiency in Mandarin Chinese and English
Interests: Tennis, basketball, squash, anime, minecraft