

# Nuo Wen Lei

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## EDUCATION

**Brown University**, *Sc.B. Computer Science*, 4.00/4.00 GPA

Providence, RI | **Expected Graduation May 2026**

**Relevant Courses:** Deep Learning, Software Engineering, Computer Systems, Database Management Systems, Data Engineering, Large Language Models (LLM), Computer Vision, Statistics, Machine Learning, Data Science, Data Structure and Algorithms

**Organizations:** Brown Entrepreneurship Program Tech Team, Brown Machine Intelligence Community (B-MIC)

**Certificates:** [Advanced Data Science with IBM](#), [Machine Learning Engineering for Production \(MLOps\)](#)

## WORK EXPERIENCE

**Stealth Startup**, *Member of Technical Staff*

Remote | Sep 2024 – Current

- Built **LLM-integrated web search** component in **Python** using **Playwright** to manage headless browsers and **Pydantic** models to enforce strong typings on LLM inputs and outputs, handling **hundreds of concurrent search requests**
- Developed the product frontend and owned the entire frontend development stack in **Next.js**, **Tailwind**, and **Material UI**
- Integrated core infrastructure features such as user authentication with **KeyCloak** and object storage with **MongoDB**, improving system security and data management
- Designed and implemented an LLM-based document metadata extraction framework based on defined **Pydantic** models from document chunks in **ChunkDB**, streamlining data processing and accuracy
- Communicated with sales representatives about core features and tradeoffs of the product

**Microsoft**, *Software Engineering Intern*

Redmond, WA | Jun 2024 – Aug 2024

- Developed and published [SDK integration examples](#) in **Next.js**, **Vue.js**, and **Angular** to streamline enterprise integration for the **Face Liveness SDK**, reducing setup process by **50%** and improving accessibility for enterprise developers
- Contributed to **rapid adoption** such that within **one month** of release, **24 enterprises** used the SDK through these examples, resulting in **2000+ API calls**, demonstrating immediate impact with enterprise clients
- Configured **Azure DevOps** pipelines in **YAML** to automate build, deployment, and testing using continuous integration and continuous deployment (**CI/CD**), reducing manual errors and speeding up development cycle
- Deployed and presented web apps with the **ASP.NET server stack** on **Microsoft Azure App Service**

**Brown University**, *Undergraduate Teaching Assistant*

Providence, RI | Jan 2024 – May 2024

- Improved **Computer Vision conceptual** questions for **130+ students**, deepening student understanding on image extraction
- Implemented partial credit system on autograding server using **Python**, correcting the grades of **100+ submissions**
- Answered or assisted on **40+ course forum questions** about programming assignments and conceptual questions

**QuantGuide**, *Founding Engineer*

Virtual | May 2023 – Nov 2023

- Led website frontend development using **React.js** with **Next.js**, impacting **7000+ users**
- Worked with content and engineering team members in an agile environment with **Kanban** for project tracking helping the startup join the **Y Combinator accelerator program (YC)**
- Integrated **Firebase Firestore** to handle content queries and record all user interactions with the website, including profile changes, likes, dislikes, and question notes, totaling **1M+ daily reads and writes**
- Developed and delivered new features with TypeScript including an auto-generating mental math game played **16000+ times**

**Numerai**, *Software Engineering Intern*

San Francisco, CA | Jun 2023 – Aug 2023

- Deployed a **machine learning model** improving **Sharpe Ratio by 22%** in backtests, managing **over \$100 million in assets**
- Backtested and documented **200+ ensemble model** configurations in **AWS Sagemaker** using **Python** to optimize for Sharpe Ratio while minimizing Churn Rate, Market Exposures, and other risk metrics
- Proposed and validated a new alpha uniqueness metric with **Pandas Python library** for **2000+ users**

## SKILLS

**Technical Skills:** Python, Typescript, Go, R, Java, C#, SQL, HTML, CSS

**Development Tools:** GitHub, Docker, Amazon Web Services (AWS), Kubernetes, Microsoft Azure, Google Cloud

**Web Frameworks:** Django, Flask, FastAPI, Next.js, Vue.js, Angular, Node.js, ASP.NET

**Language:** Bilingual proficiency in Mandarin Chinese and English