

Wang Hao(Nelson) Shih

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EDUCATION

University of California, Berkeley *Bachelor's Degree*

Aug 2022 - Dec 2024

Major: Data Science | Political Economy

Coursework: Inference, Optimal Control, Machine Learning, Data Structure

Certificates: Google Data Analytics Professional Certificate, IBM Machine Learning Specialization

EXPERIENCE

Software Developer

Apr 2025 - Present

I-Heart Health

Berkeley, CA

- Developed the Core AI Chat feature using OpenAI API and Django backend agents; contributed to full-stack development with responsive front-end interfaces and backend systems using Django REST Framework, JWT.

Software Developer & Sales

Jul 2020 - Aug 2022 | May 2024 - Aug 2024

WinJa Business Information Limited Company

Tainan, Taiwan

- Designed and built an interactive web map using Google API to optimize delivery routes.
- Closed a large-scale hardware contract with MINMAX TECHNOLOGY CO., LTD.
- Secured a 3-year contract with Tainan Nissan Auto Corporation

Data Science Researcher

Jan 2024 - May 2024

Data Science Discovery Program

Berkeley, CA

- Selected as one of six award winners among 110+ teams at the Spring 2024 Data Science Discovery Symposium.
- Developed radial charts to visualize journalist and media source biases, revealing key patterns in news reporting
- Integrated data and sentiment analysis to detect misinformation trends.

PROJECTS

Interactive World-Building | *Java Data Structures*

- Built an interactive 2D procedurally generated world with keyboard-controlled avatar movement.
- Designed a real-time HUD for immersive gameplay feedback.

Advanced Business Data Analysis | *R Machine Learning Models*

- Built and tuned neural networks and SVMs to predict 12-month stock price growth over 30%.
- Evaluated and optimized models for best business performance, recommending a \$1M investment portfolio for a maximum 12-month return.

Electricity Trends: Weather Impacts, Clean Power Plan, and Method Comparison | *Python Bayesian Inference*

- Leveraged Bayesian and causal inference (2SLS) to analyze relationships and control for confounders.
- Applied GLMs (Linear, Ridge, Lasso) to manage multicollinearity and reduce overfitting.
- Used non-parametric models (Support Vector Regression, Random Forest, KNN) to capture non-linear patterns.
- Employed Gradient Boosting Regression to enhance predictive accuracy and performance.

SKILLS

Tools/Software: Django, MongoDB, PostgreSQL, Tableau, Pandas, Matplotlib, Seaborn, Scikit-learn,

Programming Languages: Java, Python, R, SQL, HTML, CSS, JavaScript