Hsiang-Chun (Nathan) Wang

09[redacted] nathan.wang.company@gmail.com Hsiang-Chun Wang Homepage wangxchun Feb. 5, 2000

EDUCATION

National Taiwan University (NTU) **09/2022 – 06/2024**
M.S. in Communication Engineering *Taipei, Taiwan*

Shanghai Jiao Tong University (SJTU) **09/2018 – 08/2022**
B.S. in Information Engineering *Shanghai, China*

ACADEMIC & PROFESSIONAL HIGHLIGHTS (PHOTOS)

- Specialized in reinforcement learning and deep learning during Master's studies. Spearheaded research efforts resulting in two published papers at top-tier ML conferences (NeurIPS, ICML, ICLR), with poster presentations in Vienna and Vancouver. Secured support from the NSTC international travel grant. Quantified impact, with publications cited over 30 times to date.
- Won the 2024 TAAI Master's Thesis Award and the Best Master's Thesis Award from the Graduate Institute of Communication Engineering, NTU. Invited to deliver talks on research experience and contributions.
- Collaborated actively in the machine learning research community, served as a reviewer for ICLR 2025 and NeurIPS 2025.
- Received high recognition for engineering training in industry settings, including multi-threading, interprocess communication, socket programming, internationalization (I18N), and defensive programming.
- Joined UC Capital as the first member in the AI division. Successfully demonstrated RL-based strategies, prompting leadership to formally establish and expand the AI team.

WORK EXPERIENCE

UC Capital **10/2024 – present**
AI Researcher *Taipei, Taiwan*

- Spearheaded the research and development of advanced machine learning techniques for various aspects of stock trading, resulting in 2 patent filings and improved model accuracy by **15%** on average across historical trading scenarios.
- Utilized SQL queries and Python scripts to process and validate over **10.8TB of trading data**; optimized data cleaning and feature engineering pipelines, reducing processing time by **60%** and significantly accelerating downstream modeling workflows.

RESEARCH PROJECTS

Diffusion-Reward Adversarial Imitation Learning **04/2023 – 08/2024**
Leading Author, Paper, Project Page, Code *Neural Information Processing Systems (NeurIPS) 2024*

- Spearheaded a joint research initiative with a senior NVIDIA researcher, aligning goals and streamlining cross-team execution.
- Implemented adaptive research strategies and proactively sought feedback, demonstrating resilience in the face of setbacks; accelerated progress enabled milestone completion **4 months ahead of schedule**.

Diffusion Model-Augmented Behavioral Cloning **06/2022 – 05/2024**
Leading Author, Paper, Project Page, Code *International Conference on Machine Learning (ICML) 2024*

- Spearheaded the identification of innovative research contributions, coordinated the team to devise solutions.
- Expanded the lab's research directions—my work inspired **5 follow-up works**, 2 of which were accepted by top-tier venues or integrated into ongoing industrial collaborations—consistently driving innovation and impact in the field.

EXTRACURRICULAR PROJECTS & LEADERSHIP

Autonomous Driving Team, Algorithm Group **08/2019 – 12/2020**
Algorithm Team Leader, Competition *Shanghai, China*

- Spearheaded the design and implementation of autonomous racing algorithms, enabling high-speed navigation and real-time obstacle avoidance in compliance with safety and competition rules.
- Collaborated with hardware engineers to streamline system integration, reducing lap times by **30%**.
- Selected as team lead for technical excellence; supervised junior members and conducted iterative testing to optimize performance.

RoboMaster Robotics Team, Algorithm Group, Second Place in 2019 National Competition **12/2018 – 09/2019**
Algorithm Team Member, Competition, Code *Shanghai, China*

- Contributed to designing, building, and programming robots for tasks like projectile targeting, obstacle navigation, and combat.
- Assisted in optimizing robot performance, enhancing efficiency in competitive tasks.

University Debate Team **09/2018 – 02/2020**
Debater and Peer Coach *Shanghai, China*

- Trained rigorously for the Freshman Cup, mastering debate formats, argumentation techniques, and case structuring.
- Selected to represent the department in university-wide debate competitions based on performance and progress.
- Mentored **8+ junior debaters**, designing and delivering **3+ training workshops** on rebuttal strategies and critical reasoning.

SKILLS/QUALIFICATIONS

Programming	Python, C/C++, LaTeX
Machine Learning	PyTorch, TensorFlow, HuggingFace, Scikit-learn, Weights and Biases
Database	SQL Server, MariaDB
Development Tools	VS Code, Git, Docker, Linux, Make, CMake, Jupyter Notebook (.ipynb), JupyterLab
Interests	Snowboard (intermediate), Lego (50+ sets built), Tennis (beginner)