SHIYI (DENNIS) HU

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EDUCATION

New York University Shanghai   Shanghai, China
BS in Data Science, BS in Economics | **GPA**: 3.91/4.00   Sep 2019 – May 2023
   New York University Abu Dhabi – Fall 2021   Abu Dhabi, United Arab Emirates
   New York University New York – Spring 2022   New York, United States of America
Awards: Peng Yachao Global Excellence Scholarship | NYU Shanghai 2022 Recognition Award | Dean's List 2020, 2021, 2022

RESEARCH EXPERIENCE

Factual Generalization Capabilities of GPT-3 Across Domains   New York, USA
Undergraduate Researcher with Prof. Samuel Bowman (NYU New York)   Mar 2022 – Jun 2022
- Produced a paper on the falsehood patterns of large language models, and how to make them more truthful
- Crowdsourced 2000+ question-answer pairs to generate 200,000+ prompts with effectiveness evaluated on GPT-3
- Performed transfer learning on 36,000 samples to find that GPT-3 produces 43% less falsehoods with more prompts

RL for CAD Flows and Secure Chip Design   Abu Dhabi, UAE
Research Assistant to Prof. Ozgur Sinanoglu (NYU Abu Dhabi)   Oct 2021 – Mar 2022
- Implemented reinforcement learning algorithms to replace human experts in the logic synthesis phase of chip design
- Proposed a novel A2C agent learning framework to simulate 30+ attack situations, enhancing chip security
- Delivered an average area improvement of 13.19% compared to human expert-crafted circuits based EPFL benchmarks

NBA Winning Rate and Season Record Prediction   Shanghai, China
Undergraduate Researcher with Prof. Li Guo (NYU Shanghai)   Mar 2021 – May 2021
- Implemented 6 different machine learning models to predict NBA game outcomes based on pre-game team stats
- Developed aggregate functions to automate raw dataset preprocessing and dynamic data extraction on 12,300 games
- Improved prediction accuracy by 5.8% over the brute homecourt advantage prediction with optimized model

PROFESSIONAL EXPERIENCE

Craft Associates (censorship-resistant NLP)   Shanghai, China
Data Analyst Intern   Jul 2022 – Present
- Worked closely with the founder to develop a pipeline that fetches, aggregates, and sorts Weibo and WeChat posts
- Developed censorship-resistant NLP algorithms to filter 30,000+ web posts based on relevance to given keywords
- Delivered monthly data-curated market insights to clients from tech companies such Qualcomm and Huawei

Applied Artificial Intelligence Center, Shanghai General Hospital   Shanghai, China
Research Analyst Intern   May 2021 – Nov 2021
- Worked closely with a team of researchers to build an intelligent diagnosis platform for mild-symptom patients
- Gathered empirical patient data and trained a large neural network for arrhythmia detection with f1 score of 0.813
- Produced two 3,000-word reports on the ethical and social impacts of the project and presented to stakeholders in the third-quarter conference

COMMUNITY SERVICE

United Nations World Food Program, Data Management Volunteer   Jun 2022 – Present
- Produced content analytics for 15+ videos for the World Food Program, 3 of which landed on the UN App
- Supported three interviews on WFP's programs on balance and mental wellbeing during prolonged lockdown periods

Global Writing and Speaking Fellows, NYU Shanghai Writing and Speaking Learning Assistant   Feb 2021 – Present
- Curated 30 total hours of academic writing practicums as a weekly series for Global Writing and Speaking Fellows
- 300+ hours of one-on-one tutoring with NYU undergraduates on writing research proposals, literature reviews, etc.

International Youth Neuroscience Association, Head of Events Committee   Feb 2020 – Present
- Planned reception for the Brain Awareness Week with a capacity for 300+ contestants, judges, audience, and panelists
- Executed outreach to Tongji University for competition events promotion and secured a place in its newsletter

Shanghai International Marathon, Volunteer   Nov 2019, 2020
- Distributed medals to the half-marathon and 10k race, helped with delivering food and medicine to 8 designated spots

SHKP Charity Run, Volunteer   Oct 2019
- Helped plan reception and scheduling for 17,000+ runners in charity for the Shanghai Children's Healthy Foundation

SKILLS & INTERESTS

- **Programming skills**: Python (Numpy, Scikit Learn, Pandas, Flask, Pytorch), SQL, MongoDB, R, Stata, Verilog
- **Interests:** Athletic trainer, shooting guard on school basketball team; writer and translator on UnCoVer (a WeChat subscription account with 2k+ followers); amateur music producer and beatmaker