

WEI-CHIH HUANG

OBJECTIVE

[Email](#) ◇ [Linkedin](#) ◇ [Github](#) ◇ [Personal Website](#)

Seeking a challenging position as a ***Data Scientist***. Detail-oriented and results-driven physics PhD candidate with a strong background in theoretical high-energy particle physics and a proven track record of publishing impactful research. Eager to contribute to data-driven decision-making processes and bring a unique blend of analytical skills, research experience, and leadership in both academic and practical settings.

EDUCATION

PhD in Physics, Texas A&M University, US
BS in Physics, National Tsing Hua University, Taiwan

Aug 2019 - Aug 2025 (expected)
Aug 2015 - Jun 2019

EXPERIENCE

Pro Cyclists Race Analysis - Data analysis, Machine Learning, Pytorch, Cloud computing

[github](#)

- Achieved 20% better performance than a trivial model with machine learning models
- Boosted web scraping BeautifulSoup by 500% with multi-threading
- Preprocessed the data (clean, format, normalize) with NumPy, Pandas, SciPy, and scikit-learn
- Saved 80% costs (compared to AWS, GCP, Azure) by deploying data and model to [Runpod](#) (GPU cloud)

Aggie Job Referral - Django, PostgreSQL, Cloud

[github](#)

- Led a 10-people team and successfully deployed a dynamic website using Django
- Built a referral website to reduce the time of networking by 40%
- Designed PostgreSQL database schema to save the disk space by 20%

Dark Matter-Nucleus Scattering (Phd Research) - Statistical analysis, Python, C++

[github](#)

- Conducted the statistical analysis on the large multi-dimensional outputs by Python
- Accelerated the analysis by 1000 times with multiprocessing, caching, and C++
- Published 4 papers and presented several successful talks at conferences

EXTRA-CURRICULAR ACTIVITIES

- Project Manager at [Aggie Coding Club](#) 2022
- Data Science Ambassador representing Physics Department at Texas A&M [webpage](#) 2022 - 2023

HONORS AND AWARDS

- **Data Science Ambassador Scholarship** 2022 - 2023
Data Science Ambassador Scholarship Program at Texas A&M Institute of Data Science
- **Three Years Tsing Hua University Scholarship (2% acceptance rate)** 2015 - 2018
Tuition waiver plus accommodation and textbooks subsidy
- **Undergraduate Research Scholarship** Fall 2018
The scholarship for the New Gravity Theory

PUBLICATION

- Probing the dark sector with nuclear transition photons [arxiv](#)
- Inelastic nuclear scattering from neutrinos and dark matter [arxiv](#)
- Short Baseline Neutrino Anomalies at Stopped Pion Experiments [arxiv](#)
- Axion-Like Particle Production at Beam Dump Experiments with Distinct Nuclear Excitation Lines [arxiv](#)