Chen Li

CONTACT
INFORMATION

Email: chenli@icecube.wisc.edu
GitHub: https://github.com/ChenLi2049
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Chamberlin Hall, Department of Physics, University of Wisconsin–Madison, 53706

EDUCATION

University of Wisconsin-Madison
Ph.D. candidate in Physics   Sep 2024 - Present
Advisor: Dr. Francis Halzen

Wuhan University
B.S. in Physics, GPA: 3.81/4.00   Sep 2020 - June 2024

PUBLICATIONS

C. Li, H. Cai, X. Y. Jiang. Refine Neutrino Events Reconstruction with BEiT-3[J]. Journal of Instrumentation, 2024, 19(06): T06003. [arXiv]

C. Li, H. Y. Ma, X. Y. Jiang. Modification on refitting ammeter using compensation method[J]. (in Chinese, submitted to journal)

TALKS

Transformer Model for Neutrino Events Reconstruction: ISeeCube [slides]
IceCube Collaboration Meeting Fall 2024   Sep 2024

ISeeCube and Auxiliary [slides]
University of Wisconsin-Madison   Sep 2024

ISeeCube and Auxiliary [slides]
Tsung-Dao Lee Institute   July 2024

TEACHING
EXPERIENCE

Teaching Assistant

Wuhan University   Sep 2023 - June 2024
Introductory Machine Learning. I mainly teach how to write Machine Learning code in practice and answer questions from students. The teaching material that I wrote are summarized into these blog posts: *Wow It Fits! - Secondhand Machine Learning*, *Machine Learning Notes: RNN, LSTM, GRU, RWKV*, *Machine Learning Notes: GNN, GraphNeT*, *Machine Learning Notes: Maximum Likelihood, Cross Entropy*.
Adviser: Dr. Xianyang Jiang

WORKING
EXPERIENCE

Research Assistant

Wisconsin IceCube Particle Astrophysics Center   Aug 2024 - Present
Adviser: Dr. Francis Halzen

Class President

University of Cambridge   Aug 2022
Introductory Astronomy. I mainly organize class affairs, communicate with the teacher and write preview notes before lectures. Presentation from our group can be found here.
Adviser: Dr. Matthew Bothwell

PROJECTS **ISeeCube** Aug 2023
Neutrino Events Reconstruction with Transformer. When having relatively same amount of total parameters, it outperforms other Transformer models. [code]

Chinese translation of PEP 8 May 2023
Get familiar with Python syntax and, weirdly, Markdown indentation. [code]

Dr. Slidelove Apr 2023
Write in Markdown, then present with offline HTML pages. [code]

Reproduce the X-ray variability of a microquasar Dec 2022
Use Python to solve stochastic differential equations and visualize the result. [code]

HONORS AND AWARDS

Academic Scholarship, Wuhan University 2021, 2022, 2023

First Prize, Third Wuhan University College Student Academic Forum 2021

COMPUTER SKILLS Familiar: Python, C++, Markdown, LaTeX
Getting familiar: Mojo, Rust, R, HTML, CSS