Chen Li

CONTACT Email: chenli@icecube.wisc.edu

INFORMATION GitHub: https://github.com/chenlinear

Personal Website: https://chenlinear.github.io ORCID: https://orcid.org/0009-0000-4848-5113

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 Instru-

mentation, 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 Teaching Assistant

EXPERIENCE 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 Research Assistant

EXPERIENCE 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 Academic Scholarship, Wuhan University 2021, 2022, 2023

AWARDS First Prize, Third Wuhan University College Student Academic Forum 2021

COMPUTER SKILLS Familiar: Python, C++, Markdown, LATEX

Getting familiar: Mojo, Rust, R, HTML, CSS