KEVIN ZHANG

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EDUCATION

Carnegie Mellon University

June 2023 - Present

Bachelor of Science, Computer Science

Relevant Coursework: Principles of Imperative Computation, Mathematical Foundations for Computer Science, Great Practical Ideas in Computer Science, Matrix Theory, Great Theoretical Ideas in Computer Science, Principles of Functional Programming

SKILLS

Languages C++, JavaScript, Java, C#, C, Swift, Python, HTML, CSS, LTEX, MATLAB

Technologies Node, Express, React, Three, JQuery, Linux, JSON, Jeykyll

Skills Computational Physics, Data Analysis, Web Development, Mobile App Development

EXPERIENCE

Fermilab June 2021 - June 2023

Student Researcher Batavia, IL

· Deployed machine learning models that lowered lepton jet misclassification rates by 61.8% from the theoretical limit of cuts-based methods currently used in my group

· Processed LHC Run II data and Monte-Carlo simulations for training and validating the afforementioned models

PROJECTS

Radiosity Engine

December 2020 - April 2021

· A simple rendering engine that works by applying the finite element method to solve the rendering equation for the given scene. The radiosity method isn't view-limited and is computationally cheaper than ray-tracing for rendering the same static scene. The code and instructions for running it can be found on my GitHub page.

SELECTED AWARDS AND HONORS

Score of 19 on the William Lowell Putnam Mathematical Competition

2×US Physics Olympiad (USAPhO) Bronze Medal

3×American Invitational Mathematics Examination (AIME) Qualification

[CMS] "Prospects for a Search for Doubly Charged Higgs Bosons at the HL-LHC". Publication link.