KEVIN ZHANG

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EDUCATION

Carnegie Mellon University   June 2023 - Present
Bachelor of Science, Computer Science   *Pittsburgh, PA*

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

SKILLS

· C++, Java, Python, Git, JavaScript, Regex, JSON, HTML, CSS
· Linux, MATLAB, LaTeX, Visual Studio Code, IntelliJ, Github, MacOS, Windows
· Parallel Programming, Data Analysis, Machine Learning

EXPERIENCE

CMU Data Interaction Group   May 2024 - August 2024
Student Researcher   *Pittsburgh, PA*

· Working on the Mosaic project under Professor Dominik Moritz.
· Reduced client-to-server querying latency by around 10% through batching and parallelization, currently improving efficiency of caching query results to further reduce latency.

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

· A simple MATLAB rendering engine that works by applying the finite element method to solve the rendering equation for a given scene.

SELECTED AWARDS AND HONORS

· $2\times$ US Physics Olympiad (USAPhO) Bronze Medal (2022, 2023)
· $3\times$ American Invitational Mathematics Examination (AIME) Qualification (2021, 2022, 2023)
· Score of 19 on the William Lowell Putnam Mathematical Competition
· Math Chair of Mu Alpha Theta IMSA Chapter $(2022 - 2023)$
· Vice President of Code Society $(2021 - 2023)$
· Professional Physics Publication. "Prospects for a Search for Doubly Charged Higgs Bosons at the HL-LHC". Link.