Gunnar Hammonds

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EDUCATION

University of Rochester, Rochester, NY
B.S. Computer Science (2023)

2020-2023

University of Michigan, Ann Arbor, MI

2019-2020 (Transferred)

3.86 / 4.0 Cumulative GPA

EXPERIENCE

***NSF Research Experience for Undergraduates (REU)*, Horizon Lab - University of Rochester**
May 2021 - August 2021

- Assisted Professor Yuhao Zhu and his computer architecture research group, studying how to efficiently process nearest neighbor searches (NNS) on point clouds, with potential applications in autonomous vehicles and machine learning.
- Helped to propose a hardware accelerator design that minimizes memory usage and load times. Designed and implemented a hardware accelerator simulator with Python, providing the team with data on how changes to the accelerator's design could impact performance and accuracy.
- Presented topical computer architecture papers to the group, highlighting other research in the field.

SKILLS

- Proficient in Java, Python, C, C++, Go, and R
- Familiarity developing on both Linux and Windows systems, using Git version control
- Experience in research settings, effectively communicating ideas and presenting findings to group
- Knowledge of computer networking and related tools: Wireshark, Netstat, etc.

PROJECTS

Hardware Accelerator Simulator-2021

Python program which simulates configurable hardware accelerator. Nearest neighbor searches are inputted as queries and processed using a k-d tree search. Computation is tracked cycle by cycle, with the processor pipeline, cache, and DRAM all being simulated. When finished, the simulation outputs a CSV file containing information including memory access counts, cache bank conflicts, and total cycle time.

Creative AI-2020

Team project to design and implement a language processing model which could generate lyrics and music based on inputted song data.

EXTRACURRICULARS

Jazz Guitar

Active Performer in a number of ensembles and small combos, performing live and in recording sessions.