Jamison Kerney

✉ jkerney@hawk.iit.edu   📞 312-731-2822   ⓞ kerneyj

Research Interest

I am broadly interested in Parallel Programming, Operating Systems, Compilers, Computer Architecture, and their usages towards High-Performance Computing. As a voracious tinkerer, I have a deep fascination for hacking on OS kernels. By actively engaging in modifying and extending kernels, I gain a profound understanding of the interactions between software and hardware, refining my programming skills and problem-solving approach.

Education

B.S., Computer Science   Graduating May 2024
Illinois Institute of Technology, Chicago, IL   3.73 GPA
College of Computing
Relevant coursework: Operating Systems, Computer Architecture, Parallel and Distributed Computing

M.S., Computer Science   Graduating May 2024
Illinois Institute of Technology, Chicago, IL   4.00 GPA
College of Computing
Relevant coursework: Advanced OS, Combinatorial Optmization, Data Intensive Computing

Experience

University of Chicago, Chicago, IL: Undergraduate Student Research   May 2023 – Current

- Worked with Globus Labs to improve workflow and container systems

Illinois Institute of Technology, Chicago, IL: Undergraduate Student Researcher   May 2022 – Current

- Worked with HExSA Lab on unikernels to improve boot time of workflow systems (Collab with Globus)
- Worked with DataSys Lab on Fine-grained parallelism in Python parallel workflow systems (Collab with Globus)

Northwestern University, Evanston, IL: Undergraduate Student Researcher   Mar 2023 – May 2023

- Worked with Prescience lab on understanding mmap usage patterns of Database Systems

Illinois Institute of Technology, Chicago, IL: Undergraduate Teaching Assistant   Jan 2022 – May 2023

- CS 351 Systems Programming: assisted students on labs, helped with test prep
- CS 116 Intro to Object Oriented Programming: assisted students on labs, helped with test prep, graded labs

Receptify, Chicago, IL: Software developer to CTO   Jan 2022 – Sep 2022

- As CTO: Translated the vision of the company into a product
- As Software Developer: Used MERN to create a platform for victim response stakeholders to communicate

Publications

2023

1. Kerney, J., Hale, K., Hayot-Sasson, V. & Chard, K. *Supercharging Scientific Serverless: Slashing Cold Starts with Python UniKernels* in *SC '23 Student Research Competition: Undergraduate Posters* (2023), 3rd Place.

2. Kerney, J., Raicu, I. & Chard, K. *Transition from Coarse to Fine grain parallelism: Can it be done in Parsl?* in *2023 10th Greater Chicago Area Systems Research Workshop(GCARS)* (2023).