

Zhuoran Sun

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<https://jordan-sun.github.io/>

EDUCATION

Washington University in St. Louis

PhD, Computer Science

Expected 2028

MS, Computer Science

2023

BS, Computer Science, summa cum laude

2022

BS, Computer Engineering, summa cum laude

2022

RESEARCH

Real-Time Systems

2022-Present

- Developed a CAMkES priority DAG parser [1].
- Designed an elastic EDF-VD mixed-criticality scheduling algorithm [2].
- Implemented several elastic PDA scheduling algorithms; benchmarking (WIP).
- (WIP) Extending the elastic EDF-VD mixed-criticality scheduling algorithm.

Load Balancing GEOS-Chem High Performance (GCHP)

2023-Present

- Added a load balancer to the GCHP model.
- Developed an load balancing algorithm.
- (WIP) Developing a predictor for the workload.

PUBLICATIONS

1. Priority-based concurrency and shared resource access mechanisms for nested intercomponent requests in CAMkES

Marion Sudvarg, Zhuoran Sun, Ao Li, Christopher Gill, and Ning Zhang

Real-Time Systems, 2024

2. Elastic Scheduling for Graceful Degradation of Mixed-Criticality Systems

Zhuoran Sun, Marion Sudvarg, and Christopher Gill

In Proceedings of the 32nd International Conference on Real-Time Networks and Systems, 2025