

Meet The Team



Isha Shrestha

Computer Science

Interests:

- Distributed Systems
- Parallel Computing
- AI/ML, Data Science
- Software Engineering



Mohnish Sao

Computer Science

Interests:

- Computer Vision
- Parallel Computing
- AI/ML, Data Science



Oliver Higginbotham

Computer Engineering

Interests:

- HPC Hardware
- Storage & Filesystems
- Networking



Soyab Karki

Computer Science

Interests:

- Software Engineering
- Data Analysis
- Cloud Computing
- Data Monitoring & Obs.



Swarup Bhattarai

Physics

Interests:

- AI/ML, Data Science
- Data Analysis
- Comp. Engineering



Edward Cruz

Computer Science

Interests:

- Software & Environment Mgt.
- Performance & Res. Monitoring
- Storage & Filesystems

Familiarities



Rocky Linux:

- Enterprise-grade stability
- RHEL-compatible platform
- Secure, community driven



Spack Package Manager:

- Flexible package manager
- Reproducible builds
- HPC-optimized dependency handling



Slurm Workload Manager:

- Scalable job scheduler
- Fine-grained resource control
- HPC workload orchestration

How We Prepare

Enterprise Cluster Mirroring:

Our team manages and operates a dedicated test platform gifted by Dell, designed to mirror the enterprise systems at our HPC center. This environment allows us to develop, test, and optimize workflows in a realistic production-like setting.

By maintaining our own platform, we gain hands-on experience with system administration, performance tuning, and troubleshooting, ensuring that every team member understands the full stack — from hardware to application.

Why We Will Win

Stronger Than Ever: Building on our past IndySCC experience, we return with a stronger technical foundation, sharper skills, clearly defined strategies, and the confidence to compete at the highest level in professional settings.

Expert Support: With the backing of Mississippi State University's experienced HPC staff, we leverage deep technical expertise in cluster configuration, benchmarking, and workload orchestration, ensuring our team can rapidly adapt and deliver results under pressure.

Diverse Strengths: Our team integrates expertise spanning system administration, AI/ML, software engineering, data science, computer vision, performance optimization, and computational engineering. This broad technical base enables us to tackle a wide spectrum of HPC challenges – from low-level system tuning to application-level optimization.

Unified Purpose: We operate as a cohesive, adaptable unit focused on efficient resource utilization and rapid problem solving. Our shared passion for HPC drives us to push the limits of what's achievable in HPC environments.