



Team



Dane Lacey
PhD Student
Role: Advisor



Johannes Dittrich
Computer Science - Year 4
Role: Team Lead, Setup, NAMD, Mystery Application



Jay Junior
Computer Science - Year 4
Role: HPL, Mystery Application



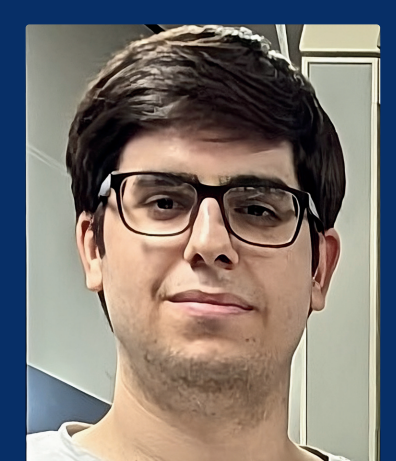
Adrian Rummel
Computer Science - Year 3
Role: MLPerf, Mystery Application



Tobias Rühl
Computer Science - Year 3
Role: MLPerf, ICON



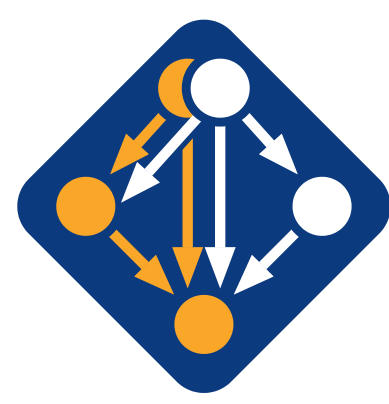
Melanie Heckel
Computer Science - Year 3
Role: NAMD, Mystery Application, Reproducibility



Onur Karaca
Computer Science - Year 2
Role: HPL, ICON, Reproducibility

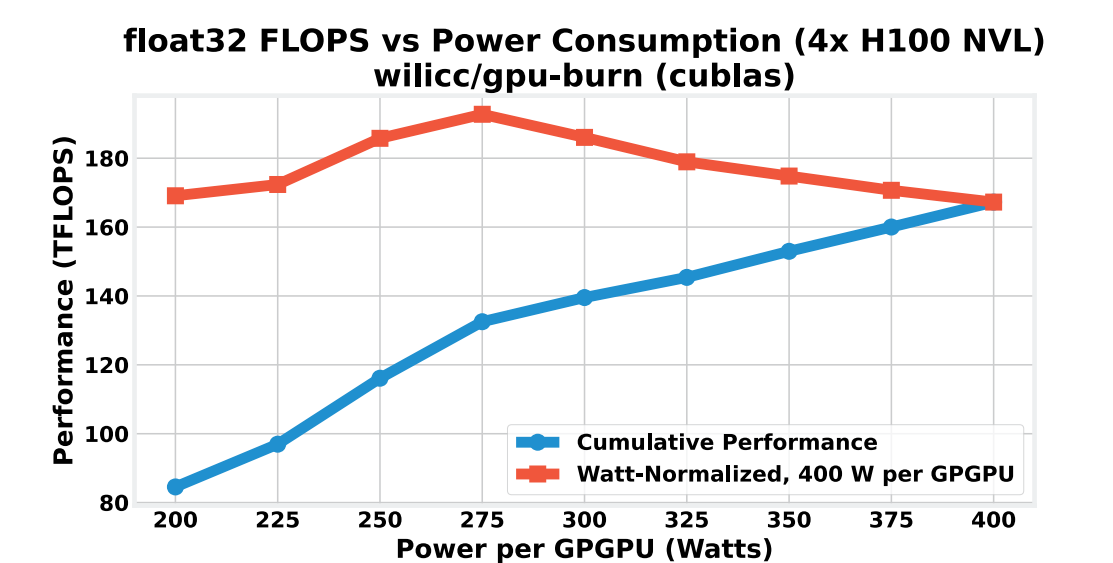
Software

- Alma Linux 9.4, automated install with Kickstart
- Ansible for synchronous node management
- GCC and other compilers installed with multiple versions
Installed via Spack, managed using modules
- Slurm for workload distribution and queuing



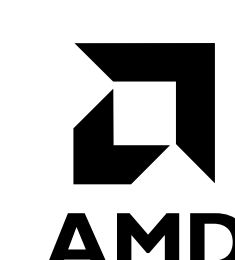
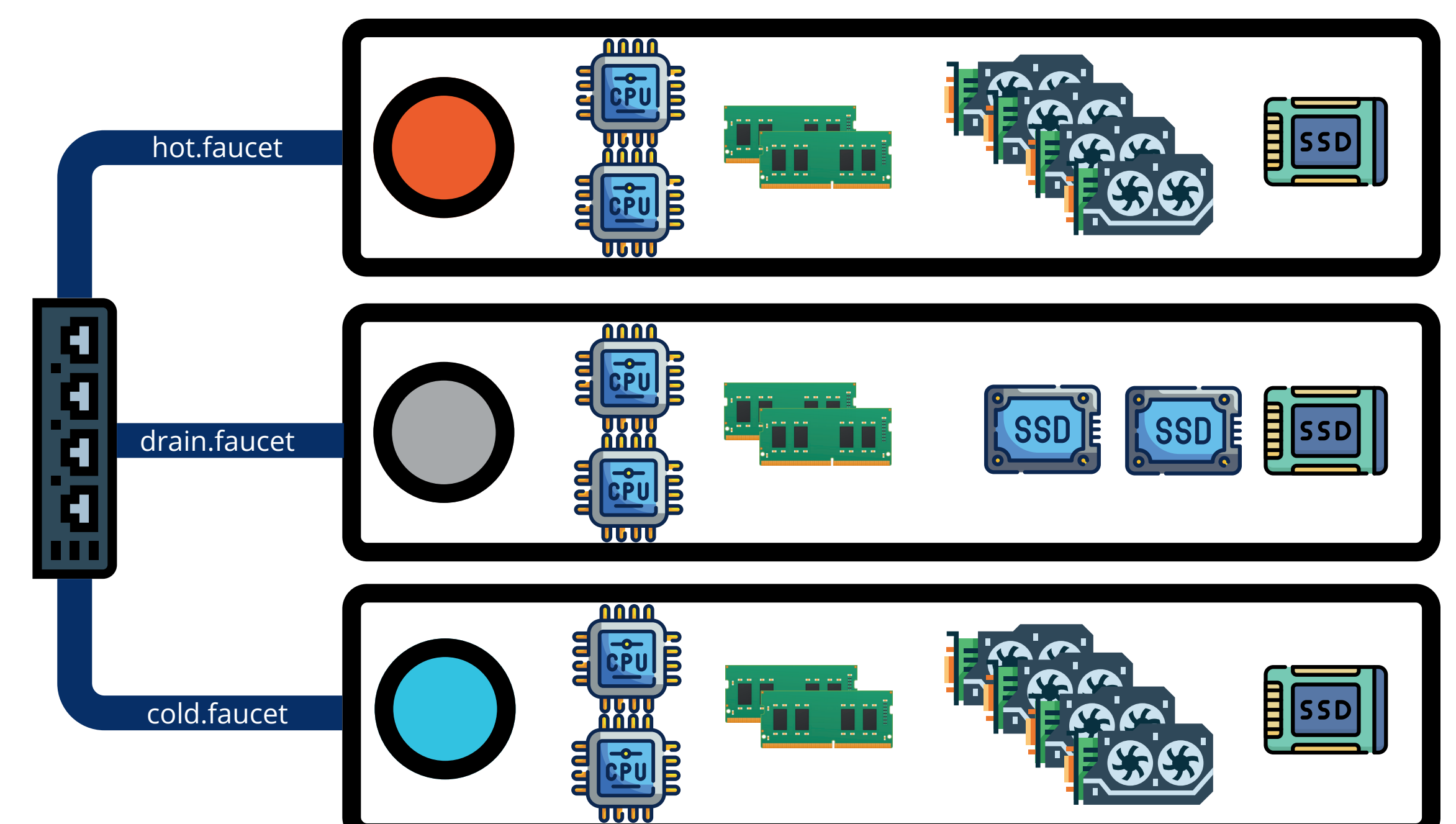
Preparation and Strategy

- Collaboration with NHR advisors and former competition participants
- Tailored HPC lab for SCC preparation graded with 10 ECTS
- Combined theory + hands-on competition training
- Access to NHR's TOP500 clusters
- Specialization in HPC benchmarks + applications



Hardware

- AMD Epyc 9654, 96 cores, 2.40-3.70GHz
2 per node, total of 576 cores (SMT disabled)
- NVIDIA H100 NVL, 94GB HBM3
2 nodes with 4 GPGPUs, total of 8 GPGPUs
- Samsung RDIMM 64GB, DDR5-4800
12 per CPU (768 GB), total of 4.6 TB
- Solidigm D5 3.84 TB
1 per node
- Micron 9400 PRO 15.36 TB
2 for head node, used as NFS storage
- NVIDIA ConnectX-7 InfiniBand NDR200
2 NICs per node, aggregated link speed of 400 Gbit/s



Sponsors:

