

Team Introduction



- Team University of Botswana (Team Basco) represents a diverse and dynamic group of computer science students passionate about learning and exploring High Performance Computing (HPC). The team consists of second-year and fourth-year students, combining fresh curiosity with solid coding and problem-solving skills. As the first ever HPC team from Botswana to compete in the IndySCC. We are determined and committed. Our strengths lie in adaptability, teamwork, and diversity both academic and cultural
- Together, we aim to represent Botswana at SC25, showcase Africa's HPC potential, and use this journey to build local capacity, inspire students, and strengthen our country's participation in computational science.

Team Contribution

- Maano Kereilemang
 - Rethabile Thabo
 - Ayesha Samoki
 - Chandapiwa Malema
 - Theo Kgosiemang
 - Phazha Chakalisa
- HERO RUN**
- PRESENTATION**
- SST TASKS**
- POSTER DESIGN**
- ECE TASKS**

Team Preparation and Strategy

Our team is inexperienced in HPC hence we built a structured preparation plan that balances training, collaboration and task specialization

- Training Session Activities:
 - To gain knowledge on HPC due to the team's inexperience, members took part in the Introduction to HPC course by EPCC.
 - Installation of OS(Ubuntu) in our instances using jetstream2 on Exosphere.
 - Network Configuration of assigning static IP and Hostnames
 - Watching benchmarks,webinars to understand more on tasks and exercises.
- Application & Benchmark :
 - Launched and configured virtual machines for HPC tasks. • Ran benchmarking and scalability experiments on multi core instances.
 - Created and attached persistent volumes on instances. • Shared resources and environments with team members through Exosphere.
- Time & Team Management:
 - HPC learning sessions every Saturday(5 hours minimum). • Spent a week semester break, running tasks,debugging and analysing linear algebra
- Competition Readiness:
 - Strong foundational understanding on HPC built within a few
 - Good working pace (tasks accomplished within schedule) • Team composition allows for quick adaptation to any arising problems when solving tasks

Supporters and Sponsors



Department of Computer
Science

IndySCC25

Resource management

- VCPUs: 32 VCPU
- GPU: Partial GPU (NVIDIA A100) g3.xl
- Flavours: m3.xl (Task 1 and Task 2), g3.medium
- Operating System: Ubuntu (Task 1 and Task 2), RockyLinux (SST practise task)
- File System: EXT4
- Compiler: NVHPC compiler and GNU compiler (GCC)
- Scheduler:SLUM workload manager

Limit Summary

