

Alex Ichetovkin, Alex Kim, Elizabeth Hong, Ananth Vivekanand, Daniel Mendes, and Sean Chalmers

Background

- Each member of our team has been trained through a specialized Vertically Integrated Project (VIP) course at Georgia Tech (GT). This course introduces students to High Performance Computing principles and prepares students for competing in cluster competitions.
- Our competition team is composed of undergraduate members who have never competed in an SC competition before.
- Team advisors include world-renowned faculty members: Dr. Richard Vuduc, Jeff Valdez, and Will Powell.
- Fields represented amongst our team members:
 - Mathematics
 - System architecture and simulations.
 - Intelligence and Theory.
 - Information-internetnetworks.

Diversity

- Team Phoenix and GT acknowledge that women are underrepresented in HPC. One of our team members, Elizabeth, is a woman.
- Ross Lindsey, graduate team advisor, is a biologist who utilizes HPC in his research.
- Our community at GT is committed to fostering lasting relationships with individuals from all races, ethnicities, and genders.

Team Members



Figure 1. Team Phoenix members with logo. Members clockwise starting from top left: Alex Ichetovkin, Alex Kim, Elizabeth Hong, Ananth Vivekanand, Daniel Mendes, and Sean Chalmers. The Phoenix logo serves as a representation of GT's cluster network and metaphor for the city of Atlanta.

Skills

- Alex I. has a background in math, specifically, number and probability theory. In CS, his research involves keyboard layout optimization utilizing C.
- Alex K. is well-versed in cmake/Makefiles and compiling applications from source. He has conducted medical research involving ultrasound data.
- Elizabeth researches SmartNICs and data compression for fluid dynamics simulation, where she has become well-versed in parallel programming.
- Ananth is experienced in machine learning model training. His prior sociology research applied ML to social media networks.
- Daniel has an expertise in Linux OS, data center networking, and system administration. This mastery of knowledge allowed him to intern with Red Hat.
- Sean specializes in information-internetnetworks and media. Using these skills, he has developed full-stack applications for education curriculum

IndySCC Strategy

- Small problem sizes will initially be run with various compilers, flags, settings, and then scaled accordingly.
- Utilize Slurm for job scheduling.
- Automation scripts for test runs, and parsing outfiles.