High Performance Computing



HPC @ TECH

1. WHY CONSIDER HPC AS A CAREER?

- **The power wall**. We are no longer getting large gains in performance by packing more integrated circuits on a chip because of power and heat distributions.
- **The future is parallel computing**. Thus, parallel platforms, including multicore machines, Graphics Processing Units (GPUs), and cloud environments, are the future.
- **New software design methods**. To make use of these new parallel platforms, you must know the techniques for programming them.
- Salary. According to simply hired.com, the national average salary for high performance computing is \$106,000. Forbes magazine reports that the median salary for cloud computing professionals in 2016 is \$124,300.
- **Exciting applications**. People in the field of parallel and distributed computing build applications that can, for example, monitor air traffic flow, visualize molecules in molecular dynamics apps, and identify hidden plaque in arteries.

2. WHY STUDY HPC @ TECH?

- Tech offers an undergraduate CS concentration in HPC
- Tech offers a graduate CS program (MS and PhD) in High Performance Computing
- You will have the opportunity to work with faculty who are actively doing research in parallel, distributed, and high performance computing



Examples of work in HPC at Tech