SIG HPC Education

- The Community Speaks
- October 2, 2017

Chris Wentworth
Professor of Physics
Doane University
Doane University

Composed of three colleges:
• College of Arts & Sciences – traditional residential liberal arts campus; ~1100 FTE; offers the computational studies minors
• College of Education – undergraduate and graduate programs in education
• College of Professional Studies – undergraduate and graduate programs that serve non-traditional students
• COE & CPS have ~2000 total students enrolled
Doane offers two computational studies related minors.

Computational Science – meant to complement majors in the natural sciences - biology, chemistry, physics, environmental science, and mathematics.

Computational Thinking – meant to complement majors in fine arts and humanities, business and economics, education, and the social sciences.
2013 –

• faculty from Science & Mathematics, Business, and Social Science Divisions form a workgroup;
• hosted a workshop sponsored by XSEDE and Shodor (Steven Gordon and Robert Panoff);
• finalized and passed a curriculum proposal in fall

2014

• The two minors are officially offered
• Fundamentals of Computational Science course taught for first time
• A computational physics emphasis is offered for physics majors

2017

• our first CS (3) and CT (1) minor students graduated
Computational Science Minor

Computational Thinking Minor
Challenges

- Ownership of the computational studies program is diffuse.
- Undergraduate students are not familiar with the concept of computational science/thinking.
- Active recruitment of students is required.