

Motivation

- **EMPLOYMENT OPPORTUNITIES ABUNDANT:** Nation's first post-bacc CS program targeted to realigning college graduates to jobs
- **ECONOMICAL & TIME EFFICIENT:** Bachelor's degree in CS can be completed in one, two, or three years
- **ACTIVE LEARNING INSTRUCTION:** Courses delivered using best known methods for on-line instruction to ensure effective learning
- **RELEVANCE, INNOVATION, AND COLLABORATION:** Key experiences and instruction reinforce professional skills and preparation
- **ADVANCES OSU'S REPUTATION:** Highlights OSU's research impact, collaboration with industry, and innovative approaches to education
- **ADDRESSES CRITICAL NEED FOR OREGON AND NATION:** Program will double OSU's BS CS graduates ready for employment or graduate school

Motivation

Targeting an Untapped Market

Combining any Bachelor's degree with the B.S. in C.S. provides opportunities greater than the sum of each:

$$1 + 1 = 3$$

According to labor experts "hybrid careers" combining "computing with other fields will increasingly be the new American jobs of the future..."

Steve Lohr, New York Times, Dec. 20, 2009

OSU is Leading the Way for the Nation

"As more and more Oregonians seek education and advanced skills in the software and technology fields, e-coursework and online programs such as this create additional degree opportunities across our state, enhancing OSU's position as a leading provider of education in this field, and increasing the likelihood that Oregon students will be able to complete their studies and find employment here in our state."

Skip Newberry, the President of the Technology Association of Oregon

(continued)

Motivation

U.S. Unemployment High *Computing Employment Needs Unmet*

- 1 in 2 new college graduates are jobless or underemployed.¹
- 69% of executives of high tech companies across the country agreed there is a national shortage of tech talent. One-quarter said it is a “significant” shortage.²
- Computing jobs to grow 22%-30%.³
- Portland is sixth fastest growing city for technology jobs.⁴
- Average salaries for graduates with computer science degrees was \$64,800 in 2013.⁵

1 Associated Press, April 23, 2012

2 “Talent Shortage May Impede New Hiring by Technology Companies,” Technology Councils of North America, <https://www.dropbox.com/s/1d92kum09izirpi/11-12-2013-TECNA%20Survey%20-%20National%20PR-FINAL.pdf>

3 “Occupational Outlook Handbook, 2010-2020,” Bureau of Labor Statistics, U.S. Department of Labor www.bls.gov/ooh/about/projections-overview.htm.

4 “March 2012: Fastest-Growing Cities for Technology Jobs,” media.dice.com/report/fastest-growing-cities-technology-jobs/.

5 “NACE Salary Survey,” National Association of Colleges and Employers, http://www.naceweb.org/uploadedFiles/NACEWeb/Research/Salary_Survey/Reports/salary-survey-april-2013-executive-summary.pdf.

Motivation

Why BS CS versus MS CS?

- Targets students interested in hybrid careers
- For students with other undergraduate degrees, getting an M.S. CS would require taking most all of the classes in this program first
- The compressed curriculum (60 credits of computer science) allows students to quickly ramp up their programming skills, so that in as little as 12 months they can have a degree in CS.
- No program of this type is offered in the country at this point – there are full B.S. and full M.S. programs but no program targets this untapped market.
- Starting salaries for BS CS are well above most other occupations (\$60k-\$95k)

Motivation

CS/CE Degrees Nationally and Locally

Nationally

- 12,171 B.S. CS/CE graduates each year in U.S.¹
- 1,532 Ph.D. CS graduates in U.S.¹
- Nearly two-thirds (63 percent) of executives from tech companies across the nation reported they plan to hire in the next 12 months.²

Oregon

- 245 B.S. C.S. graduates across Oregon Univ. System (OUS)
- There has been no increase in OUS BS CS graduates in the last decade
- 80% of Oregon tech businesses plan to hire in the next 12 months.³
- Numerous companies have located in Oregon recently and/or have extensive needs for computing graduates at all levels (BS, MS, PhD)

1. Zweben, S. and Bizot, B. 2012 *Taulbee Survey*. Computing Research News, May 2013;

http://cra.org/uploads/documents/resources/crndocs/2012_taulbee_survey.pdf

2. "Talent Shortage May Impede New Hiring by Technology Companies," Technology Councils of North America, <https://www.dropbox.com/s/1d92kum09izirpi/11-12-2013-TECNA%20Survey%20-%20National%20PR-FINAL.pdf>

3. "Oregon Tech Survey Finds Universities, Talent Shortage are Biggest Concerns," The Oregonian,

http://www.oregonlive.com/silicon-forest/index.ssf/2013/11/oregon_tech_survey_finds_unive.html