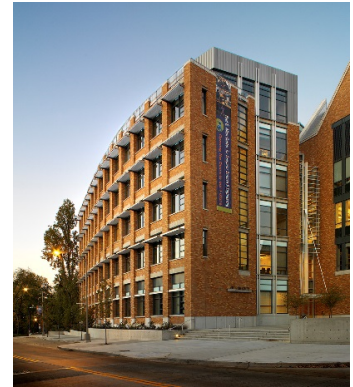# Help shape the future of University of Washington Computer Science & Engineering

Join the *Campaign for CSE*

UW CSE is revolutionizing the field of computer science, driven by a powerful vision of its expanding role in the modern university and in the modern world. We are poised to become one of a small number of truly preeminent programs in the nation, dramatically expanding our impact on Washington's students, our innovative employers and our economy, and our role in developing solutions to society's greatest challenges.

The *Campaign for CSE* is critical to unlocking this potential. Between 2000 and 2008, as part of *Campaign UW: Creating Futures*, a public-private partnership provided $72 million to fund the Paul G. Allen Center for Computer Science & Engineering, and our alumni and friends added $43 million to our endowments to support students, faculty, and a wide range of innovative initiatives. This support proved to be transformational: what was, in 2000, a very good computer science program is now a great computer science program, with all that this entails for the UW and our region.

The new *Campaign for CSE* – a key component of UW's next campaign, which will go public in the fall of 2016 – will enable us to embark upon an exciting new phase of growth and enhance our leadership in computer science and computer engineering teaching and research. The resources we raise will provide a springboard for new and expanded collaborations across the campus and around the globe, invigorate efforts to support faculty and student entrepreneurship, usher in exciting new opportunities with industry partners, and enable us to continue to be a national pacesetter in diversity.

Our goals are both *unabashedly ambitious* and *attainable*. We have a clear vision for the future. The *Campaign for CSE* will marshal the good will and the resources of our friends, alumni, and leaders in the innovation community to help us achieve that vision. Together, we can assure Washington's future position as a global center of innovation.

1. Build for our future.

We are forging a public-private partnership to assemble $110 million in funding for construction of a new 130,000 square-foot building on the university's Seattle campus. This second, state-of-the-art facility will complement the Paul G. Allen Center for Computer Science & Engineering and accommodate UW CSE's recent and future growth. The Allen Center was a game-changer when it came online in 2003. Twelve years later, we have a new opportunity to catapult UW CSE forward.

2. Invest in our people.

We aim to grow UW CSE's endowment to $200 million – an increase of $150 million. This will provide roughly $8 million per year to recruit and retain world-class faculty, educate more Washington students regardless of their means, and attract the best and brightest graduate students and postdoctoral researchers to our state. When combined with increased physical capacity and planned strategic investments by the state, these resources will enable us to dramatically expand our research enterprise, double our degree production, and significantly increase educational offerings to non-CSE majors, preparing more of Washington's students for Washington's leading-edge jobs.

> *"What really sets UW's computer science program apart are the people – the faculty and the students. The Allen Center is a wonderful home for the program, but at the end of the day it's the excitement, intelligence and innovation of the men and women in this organization that make it what it is."*
>
> Paul G. Allen, at the 2003 dedication of the building that bears his name

3. Expand our leadership.

UW CSE has more than outgrown its space – we have outgrown our position in the university. We intend to turn a great Department of Computer Science & Engineering into a world-class School of Computer Science & Engineering. This strategic move will provide us with greater visibility and autonomy, and a level of flexibility that will enable us to be even more nimble and even more impactful in defining the forefront of our rapidly advancing field.

UW CSE is one of the leading computer science programs in the nation.

UW CSE has led the way in positioning computer science as central to tackling critical national and global challenges – giving us a first-mover advantage that pays dividends in the recruitment of world-class faculty and students. We compete only with Stanford, MIT, Carnegie Mellon, and UC Berkeley as a recognized leader in computer science teaching, research and entrepreneurship.

We have thoughtfully invested our resources to help propel UW – and Washington State – to the forefront of computing innovation. Recent hires have made UW CSE a recognized leader in big data, machine learning, natural language processing, computer vision, programming languages and software engineering, privacy and security, and wireless and sensor systems. The *Campaign for CSE* will enable us to build on this success and strategically position ourselves for the future.

UW CSE's 21st Century Vision of Computer Science

UW CSE educates Washington's students for Washington's leading-edge jobs.

UW CSE is, by far, the top supplier in the state of computer science graduates to leading-edge companies of all sizes. And we continue to see explosive growth in both employer demand and student demand – demand with which we will be unable to keep pace without additional physical space and investment in increased enrollments.

As a unit of our state's flagship university, we fulfill an important mission to serve the citizens of Washington. More than 3/4ths of our students are Washington residents, and the vast majority of our graduates remain here after obtaining their degrees. (Ninety percent of UW graduates in the past two years now working under the title "software engineer" are employed in Washington.)
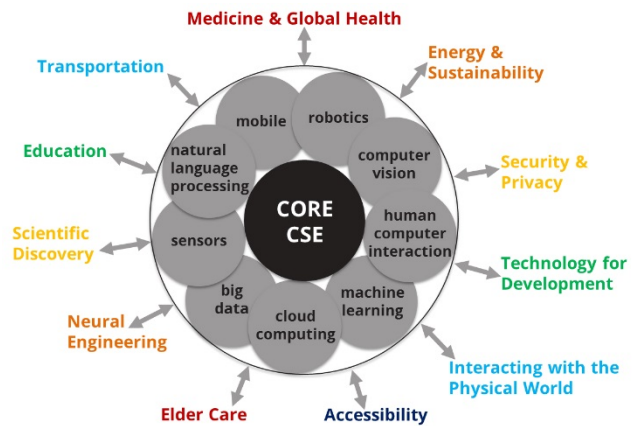
The opportunity for our citizens is great: the state has projected that Washington's workforce gap in computer science exceeds the next three most in-demand fields, combined. Nationally, 71% of all newly created jobs this decade in science, technology, engineering and mathematics will be in computing, and 57% of all available STEM jobs, whether newly created or due to retirements, will be in this field.

Although we have expanded our capacity – we produced more than 300 degrees last year and are on track to reach 375 degrees annually – at present we are only able to accommodate 1/3rd of qualified UW students who apply to our major. We also must respond to continuing growth in non-major demand for computer science: we will enroll 5,000 students in our introductory courses this year. The *Campaign for CSE* will generate critical support to meet these growing needs.

Washington's STEM Workforce Gap Baccalaureate Level and Above

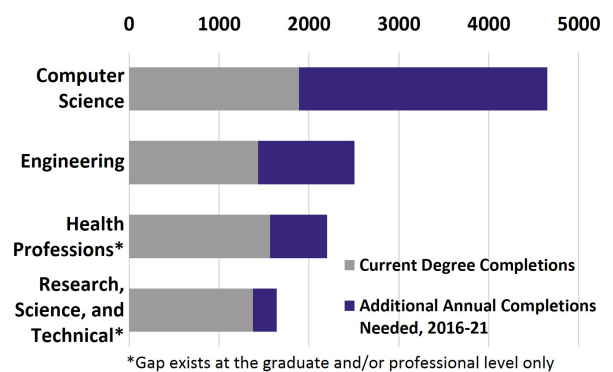*Gap exists at the graduate and/or professional level only

Computer science and computer engineering are transforming the world. UW CSE and Washington State can drive this revolution.

The *Campaign for CSE* will enable us to build upon our record as one of the nation's most innovative, entrepreneurial programs and to seize an enormous opportunity for our university, our economy, and our citizens. Contact Ed Lazowska at **lazowska@cs.washington.edu** to learn more and join us in this vital effort to shape the future of UW CSE.