# House Bill 4098 - Testimony

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House Committee on Education

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Madame Chair and members of the committee, my name is Jill Hubbard and I am a professor of Computer Science at Oregon State University. Prior to that I taught high-school computer science for over 10 years. Before becoming a teacher, I worked in the computer industry as a design engineer at Intel Corporation. Thank you for allowing me to appear before you today.

Most of us keep our phones with us 24/7. We rely on them for so many things: navigating, voting (or not), communicating, learning, creating, relaxing. Yet how many of us understand, even on a basic level, how devices work? How is data collected and used? What is artificial intelligence? How do computers analyze and solve problems? How is data transmitted and stored across the internet and is the data really secure? This is fundamental knowledge that all people need in the 21st century but only a select few receive.

According to the Bureau of Labor and Statistics, computing jobs are the #1 source of new wages in the United States and they're projected to grow at twice the rate of all other jobs. Who has access to these jobs? Barriers rise fast and early. I can still see Valeria, a 9th grade student who dropped my computer science after the first day because in her words "everyone else knew more and it was too late". That story is not unique.

In Oregon's high schools there are fewer Advanced Placement(AP) exams taken in computer science than in any other STEM subject area. In 2018, only 28 students of color took an AP CS exam in the entire state of Oregon. This lack of diversity affects

not only individuals but is also a loss of talent, creativity, and innovation for the industry and the nation as a whole.

Clearly there are disparities when it comes to computer science learning opportunities for our students and barriers to overcome. This house bill brings together stakeholders with a variety of perspectives to create a thoughtful, scaleable, sustainable, and equity-focused computer science K-12 education plan for the state of Oregon. It is sorely needed and a valuable investment.

Thank you for your time.

Jill Hubbard
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CS for Oregon Co-Principal Investigator