

December 6, 2022

To: Office of Academic Affairs & Planning  
University of Washington Graduate School

From: Magdalena Balazinska, Director, and the Executive Committee  
Paul G. Allen School of Computer Science & Engineering

Re: **Allen School Response to 2022 Program Review Report**

We begin by expressing our deep appreciation to professors Kurose, O'Donnell, Rexford, and Witten for the time, thought, and care they devoted to reviewing the Paul G. Allen School.

Their report recognized the many accomplishments of the Allen School in the 12 years since our most recent review, identified several areas where increased attention is warranted, and made what we consider to be a critically important recommendation in terms of positioning the Allen School and the University of Washington for the future.

We will briefly comment on the four recommendations in the body of the report, and on the additional suggestions contained in the appendix.

**Recommendation 1. For the university to grant the Allen School continuing status, with a next review in 10 years.**

We appreciate this recommendation, the comments that accompany it, and the comments in the *Overview* section of the report. We heartily agree that “Computer science is a core piece of 21<sup>st</sup> century intellectual life, and central to a modern 21<sup>st</sup> century university.”

**Recommendation 2. For the university to continue to recognize that the Allen School is, in many ways, unique relative to other academic units at UW, and to consider whether it should operate with greater autonomy from the College of Engineering, for the benefit of UW, its students, and local and statewide stakeholders.**

We strongly support the recommendation that the University convene a task force to consider increased autonomy for the Allen School. We also strongly support the report’s statement that “a guiding principle should be to maximize the positive impact of the Allen School across the UW, while minimizing any harm to specific units such as the College of Engineering and the College of Arts & Sciences,” and the report’s emphasis that “regardless of the findings of this task force, we encourage UW to recognize that the Allen School’s situation is unique relative to other academic units at UW, and to continue to partner with the Allen School to achieve its goals and the goals of the University.”

During the outbrief at the conclusion of the Review Committee visit, Professor O'Donnell made an important observation. Paraphrasing: “There is a national evolution going on regarding the positioning of computer science programs within universities. The University of Washington needs to seriously consider how it is going to respond, or it runs the risk of being left behind.”

We look forward to serious analysis, discussion, and consideration of this topic at UW.

**Recommendation 3. For the Allen School to continue to grow the undergraduate program, while enhancing opportunities for undergraduate research and directly including a diversity component in the curriculum.**

We strongly support the Review Committee recommendation that we continue to grow our undergraduate program. During the 2020-21 academic year we proposed a plan to grow by 400 annual degrees (undergraduate and graduate, the vast majority being undergraduate) over 4 biennia. The first 100 annual degrees were funded by the legislature during the 2021-23 biennium. We are grateful that the University is submitting a request to the legislature for the second 100 annual degrees during the 2023-25 biennium. This growth trajectory must be maintained, and if possible accelerated. (For Fall 2022 we were unable to offer Direct Admission to more than 600 Washington students who would have received Direct Admission to other College of Engineering programs. In the 2021-22 academic year we awarded only 6% of the Bachelor's degrees on the Seattle campus, a lower percentage than at many other major universities and a lower percentage than several other UW-Seattle units.)

We recognize the importance of addressing diversity in computing in our curriculum, and also ethical implications (a topic that was not noted in the report). We have been moving in this direction, and we will accelerate.

The Review Committee is also correct regarding the relatively limited opportunities for undergraduates to engage in research. Our track record is reasonable. As one example, over the past 10 years we have had more students recognized in the Computing Research Association's "Outstanding Undergraduate Researcher Award" competition than all but one of the nation's hundreds of computer science programs. However, as our undergraduate enrollment has expanded, opportunities have not kept pace. This past year we launched initiatives to increase research opportunities for undergraduates, and also for high school students. We will continue to expand these efforts.

**Recommendation 4. Continue the spirit of partnership across units of the UW ecosystem, to ensure that "a rising tide lifts all boats."**

We appreciate the Review Committee's recognition that "the rising tide of the Allen School has lifted UW as a whole." We are deeply committed to this, and we have worked hard at it.

We recognize the importance of taking great care to be outward-looking and inclusive. As noted in the Review Committee report, our track record here is strong. We also understand the potential impacts of our growth on other units of UW, and support the suggestion that UW carefully analyze these impacts.

**Appendix: Additional Suggestions for the Allen School**

Faculty mentoring and retention

We recognize the need for written policies in a unit of our size. We have, in fact, made significant progress in the past few years. We appreciate the highlighting of some additional areas where attention is needed.

DEIA

We appreciate the recognition of our commitment to DEIA, and we are pleased that the report notes the perception of a positive climate by our Ph.D. students. Broad participation in the creation of a substantive DEIA strategic plan over the past several years has contributed significantly to buy-

in. Annual independently conducted climate surveys of our undergraduate and graduate students help us to identify issues that need to be addressed.

Problematic advisors, although very small in number, are certainly of concern. We have been significantly expanding our approach to identifying issues when they arise, following up with both students and faculty, and raising these issues during annual reviews. We recognize that even greater effort is needed. The suggestion for training is a good one.

Issues of culture and social “glue” indeed loom large. COVID-induced isolation has amplified the impact of increased size. We are working hard on this.

#### Synergy with the tech industry

In 1977, when our most senior active faculty members joined what is now the Allen School, we had a dozen faculty members, and Microsoft was a dozen 20-somethings in Albuquerque. We have been blessed to grow simultaneously and in partnership with the region’s technology industry.

We acknowledge the risks inherent in partial leaves. We appreciate the latitude that the University has afforded us as we experiment to learn how to manage these relationships in ways that benefit our students, our faculty, the University, the companies, and the region. If we get this right, the competitive advantage will be enormous. This is an example of an area where, as indicated above under “Faculty mentoring and retention,” we have established detailed written policies - not just the policy exception that enables these partial leaves (which was included in our self-study), but a detailed policy and rubric for annual review and approval of these partial leaves that focuses on responsibilities such as teaching, advising, graduate student funding, committee obligations, and physical presence.

#### Budgetary constraints and opportunities

As noted earlier, we strongly support a careful analysis of the implications of continued growth and increased autonomy.

The introduction of a full-time fee-based daytime Master’s program is something we have considered, and will continue to consider. The enormous demand for our Bachelors graduates and the relatively small size of our Ph.D. program relative to our Bachelors program have caused us to feel that these are the places where we should invest our effort, until our Bachelors program meets demand on the part of highly qualified Washington students and our region’s tech industry, and until our Ph.D. program is of an appropriate scale relative to our Bachelor’s program .

#### **In Summary**

We once again express our deep appreciation to the members of the Review Committee for the time, thought, and care they devoted to this process.

For those reading the Review Committee report and this response, we would note that there is important context in our Self-Study, which we took seriously and which the Review Committee report described as “extremely thoughtful and detailed.” It is available in the section labeled “Formal Reviews of the Allen School” at <https://www.cs.washington.edu/alumni/history>.