Office of the Dean



March 9, 2020

Dr. Beth Boehm Executive Vice President and Provost University of Louisville

Dear Provost Boehm:

It is with enthusiasm that I express my support for the proposed Bachelor of Arts in Computer Science (BACS) program in the Department of Computer Science and Engineering (CSE) of the J. B. Speed School of Engineering. The BACS program takes a holistic approach to teach computer science and its applications. Built on rigorous computer science core courses that are offered in the current BS CSE program, the BACS program provides students the flexibility to study other areas such as natural and social sciences and humanities, where BACS students can apply their fundamental knowledge and practical skills of computing. Such a holistic and interdisciplinary approach will not only help cultivate students' intellect and imagination but also prepare them for a wide range of computing jobs in Louisville and beyond that increasingly require understanding and knowledge in the application fields.

The BACS program can leverage many existing courses that are already available in the BS CSE program, as well as a variety of programs from the College of Arts and Sciences and other UofL colleges. Thus, the resource demand is expected to be moderate to low, while it can have a substantial enrollment impact across units. Moreover, the BACS program has great potential to increase Speed School enrollment, including students who are inspired by this new major, some of our pre-engineering students, transfer students, students who are interested in both liberal arts and computing, and traditional or adult students who want to get double majors or completer degrees.

Compared to the current BS CSE program, which is an ABET-accredited engineering program that requires depth in mathematics, engineering, and sciences, the BACS program focuses on a balance of knowledge in computer science and effective applications of computing. Even though both programs share the same computer science courses, they target different students with different interests and backgrounds. The BS CSE degree focuses on the science and engineering of computing while the BACS degree targets the applications of computing. At the same time, due to its flexibility, the BACS program actually offers new opportunities (through more technical electives) for students to develop understanding and skills in a focused emerging computing area such as artificial intelligence, data science, and cybersecurity.

The BACS program is completely in line with our efforts to increase enrollment and is expected to produce more graduates with knowledge and skills in both computing and an application field (e.g., Communications, Geography, or English), which can help reduce the technical workforce shortage here in Louisville and Kentucky. In addition, the BACS students can choose to pursue their graduate study in Computer Science at UofL or elsewhere, which may benefit CSE graduate programs as well.

The proposed BACS program correlates with UofL's Strategic Plan and Speed School's mission. Thus, I fully endorse that the Bachelor of Arts in Computer Science program be added to the Speed School of Engineering's degree offerings.

Sincerely,

Sumanul C. Colli

Emmanuel G. Collins Dean, Speed School of Engineering



David. S. Owen, Ph.D. Interim Dean Professor of Philosophy

April 3, 2020

Dr. Gye:

We are happy to provide a letter in support of the proposed BA in Computer Science through J.B. Speed School of Engineering. We shared the information on the proposed curriculum with several departments in the College of Arts and Sciences and received very positive support for the program. All departments with minors could potentially be "other areas of study" for the BA; minors have less than 30 credits (the largest is 24 credits) so, they would easily fit into the program as described. We see this proposed curriculum as one that will attract new students to the university who would experience an innovative program that combines computer science with a strong liberal arts education.

We recognize that A&S Advisors would advise students on trajectories for their minors, Cardinal Core classes and other configurations of courses that meet requirements of the degree (to the extent that the courses are in A&S). This will require collaboration between our Advising groups. If the program were to grow at the pace described in the proposal, there may be a need for additional advising support in three or four years.

We believe that this is an excellent opportunity for A&S to collaborate with Speed on interdisciplinary curricula that appeal to our current future students and we look forward to being a part of making this program successful.

Sincerely,

David S. Owen

David S. Owen Interim Dean



Dear Provost Boehm,

I am writing this letter to give you the strong support of the Department of Mathematics for the creation of the Bachelor of Arts in Computer Science degree. The proposal for the program makes clear the need for students who not only possess skills in computer science but who also possess skills in liberal arts or other areas to meet the needs of today's industry.

The Department of Mathematics will participate in this degree by providing instruction for the Cardinal Core requirements of its students. I do not anticipate any increase in costs to the department. In fact, the department stands to benefit from majors in this degree who decide to take courses in higher mathematics, and from the opportunities this program affords for collaboration between Mathematics and Computer Science.

Ailfor ~

David Swanson, Chair Department of Mathematics

Office of the Dean



April 2, 2020

Connie Shumake Office of the Provost University of Louisville Louisville, KY 40292

Connie,

We have been asked to provide a letter of support for the proposed Bachelor of Arts program in Computer Science and Engineering in the Speed School. We have completed a review of our available resources in this area. In general, these resources are adequate to support the proposed program though we note that additional book and journal resources should be added in the computer science area going forward as resources permit. I am attaching a copy of our review.

Please contact us if you have any questions or need additional information.

Sincerely,

Flunt E 7+ J.

Robert E. Fox, Jr. Dean, University Libraries

CC: Emmanuel Collins Sarah Drerup Bruce Keisling Claudene Sproles Wei Zhang