Capstone Project in Computer Science + Music

Overview

The capstone project, a graduation requirement for students pursuing a B.S. degree in Computer Science + Music, is a project of significant scope and depth, independently developed and completed by the student during their final year, typically over the course of two semesters. In addition to completing the project itself, a public presentation of the completed work is also required, approximately 30 minutes in length.

Objective

The capstone project should be treated as an opportunity to synthesize various CS+Music concepts, skills, and techniques acquired through coursework and other relevant experiences over the past few years, and to produce a substantial work that can be regarded as a contribution to the field. Capstone projects and presentations can take many forms, but the project must have a major, original component involving computer programming or software development, and it must relate to music or sound in some substantive manner. Likewise, the presentation must be appropriate for the project.

Capstone Proposal

The student will begin by writing a capstone project proposal narrative, typed and printed on a separate document. The proposal is typically created toward the end of the junior year, and must include:

- A project title
- Background information, e.g. motivating forces/influences
- A complete description of the project, including tools/methodologies that will be involved
- Goals and deliverables, including details about the format/content of the final presentation
- A detailed timeline for when and how the project will progress

Capstone Advising and Registration

After completing the capstone proposal, the student will identify a faculty advisor who will oversee the project. The advisor must be either a faculty member within the CS+Music program, or a faculty member with appropriate expertise relevant to the project, subject to approval by a CS+Music faculty member. Once a faculty member has agreed to serve in an advisory capacity, the student should obtain permission to register for the appropriate section of the capstone course, MUS 499XXX (the section identifier will depend on the name of the faculty advisor). Although work on the capstone project typically extends over two semesters, the student should only register for the capstone course in the semester they intend to graduate.

The student will obtain their faculty advisor's signature on this form and submit it to the School of Music's undergraduate advisor, Kiersten Jonkman, along with their capstone proposal. The schedule and structure of capstone course meetings are primarily the student's responsibility, to be discussed with the advisor.

Capstone Presentations

Each semester, on the last Tuesday before the final day of instruction, Room 0359 in the Music Building (the "Fishbowl") is reserved from 4pm onward for capstone presentations. Students are encouraged to explore alternative venues for their presentation, depending on the nature of their project. Students are similarly encouraged to familiarize themselves with their selected presentation venue beforehand to test their presentations, check sound, and otherwise ensure the room meets their audio/video needs.

Regardless of presentation venue, the student must finalize and communicate the details of their presentation to their faculty advisor at least two weeks prior to the presentation date. If a student opts for a presentation venue other than MB 0359 on the reserved date, it is their responsibility to reserve an appropriate space, handle other logistical matters, and communicate reservation details with their faculty advisor at least two weeks prior to the presentation. Presentations must occur during either a fall or spring semester, ideally before the last day of instruction.

Grading

A letter grade for the capstone course will be determined by the faculty advisor in coordination with other CS+Music faculty, as appropriate, and will be based on (1) successful completion of the project, (2) clarity and effectiveness of the presentation, (3) whether project objectives were clearly defined and met, and (4) creativity/originality.

Student name: _____

Expected month/year of graduation: _____

Advisor name: _____

Advisor signature: _____ Date: _____