



Computing and the Arts: Senior Project Proposal

The senior requirement for the major in Computing and the Arts is a project approved by the director of undergraduate studies (DUS) and completed in two term courses:

- CPAR 491a or b; and
- ART 495a or b, HSAR 499a or b, MUSI 490a or 491b, or THST 491a or b, depending on the track chosen.

To ensure that your project will have the resources it needs and advisors in both computer science and your arts discipline, you must submit this form no later than noon on the last day of reading period in the second term of your junior year. Attach a proposal for the project that includes whatever details are requested by your advisors.

Student's Name: _____

Track: _____

Title of Project: _____

CPSC Advisor's Name: _____

Arts Advisor's Name: _____

We have read the attached description and agree to advise the project outlined therein.

CPSC Advisor's Signature: _____ Date: _____

Arts Advisor's Signature: _____ Date: _____

Note: This form and the attached proposal must be signed by both advisors and submitted to the DUS for Computing and the Arts (Professor Julie Dorsey, 507 AKW, 432-4249, julie.dorsey@yale.edu) no later than noon on the last day of reading period in the second term of your junior year.

Frequently Asked Questions

1. *How do I choose a project?*

There are two general approaches:

- *student sells project to professors:* for example, you get an idea, write a proposal that describes the scope of the project and includes a list of deliverables, and find faculty members in computer science and in your arts discipline willing to supervise the work (which may require changes in the proposal)
- *professor sells project to student:* for example, a faculty member in art, computer science, history of art, music, or theater studies has a list of possible projects and potential second advisors, and you select one (which may involve changes in the nature of the project)

and a host of possibilities in between.

2. *What kind of project is appropriate?*

One that requires significant work in both computing and an arts discipline, which may involve analysis, design, or expression, or some combination of the three.

A project in analysis implements and uses computational techniques to address an historical or theoretical issue in an arts discipline. Examples include creating a database of creative works and computing a set of characteristics that may answer a particular question; harmonic analysis of a piece of music; and a method for analyzing the authenticity of a painting.

A project in design develops new software tools for creative expression. Examples include programming languages for representing art, animations, or music; and extensions of a computer graphics system to allow new modes of representation. The emphasis is on the range and ease of expression facilitated by the software, rather than on creating an individual work.

A project in expression creates an individual work whose production has a computational component, such as an algorithm for music composition or for image rendering. The emphasis is on the end creative work rather than on the generality or usability of the software.

3. *Who may advise a project?*

You must have advisors from computer science and from your arts discipline. Both must be faculty members in their respective departments.

4. *When should I do my senior project?*

Most students take one of the required courses each term during their senior year. However, if your advisors approve, you may also take both courses during the second term of your senior year.

5. *In which order should I take the senior project courses?*

There is no standard order since the range of projects is so broad. Thus you should take the courses in the order that you and your advisors feel is more appropriate.

6. *What are the “deliverables?”*

Whatever you and your advisors decide you must complete by the end of the project.

7. *May I change my project at a later date?*

Yes, as long as your advisors agree to the change.