CREATIVE PROGRAMMING 2

"The real challenge is to discover the intrinsic properties of the new medium and to find out how the stroke you draw via computation is one you could never draw, or even imagine without computation." – John Maeda

DETAILS

Instructor	Prof. Jeff Thompson
Email	jeff.thompson@stevens.edu
Student hours	Wednesdays 10am–noon EST and by appointment
Drop-in hours	Thursdays 9–10.45am EST
Weekly crits	Thursdays 11am–12.50pm EST
Zoom	Links for weekly meetings on Canvas
Course materials	www.github.com/jeffThompson/CreativeProgramming2

COURSE DESCRIPTION

In this intermediate course, we'll build on creative uses of computer programming, with a focus on tools and processes for making more technically, creatively, and conceptually complex projects. We'll also look at ways to document and publish code-based projects.

We'll start with a quick ramp-up project re-creating historical artworks made with code. From there, we'll work on a series of projects exploring interactive typography, image processing, computer vision and facial recognition, and simulation. The goal with all of these projects is for you to explore the kinds of projects that artists and designers working with code can do and continue building a personal creative practice. Like in Creative Programming 1, we'll also look at historical, contemporary, and theoretical issues around computation in the arts and our culture.

FORMAT

Of course, this semester is ~~quite~~ now not so unusual! While normally we'd be hanging out in a classroom together, this semester our class will be all online. We lose some things in that process, but we also gain some: an online class means you can learn at your own pace and on your schedule, review materials as much as you like, make projects that can be shared online, and we can find creative ways to make and discuss art together, even if we're not physically in the same room.

Our main format will be:

- Weekly technical tutorials, sometimes covered in class but also available as video tutorials in a YouTube playlist
- Weekly homework projects that you'll work on independently and turn in on Canvas
- Required: regular group critiques of projects on Zoom at 11am EST
- Optional: drop-in hours during class and student hours; this is so you can ask more detailed questions, get help with your homework, etc

Where to find everything:

- Canvas: a good starting point to find assignments and due dates
- Github: all course materials including detailed assignments, links to video tutorials, code examples, images, etc

Because of this format and the technical nature of this class, it's really important that you stay on top of your coursework. Watching video tutorials, looking at code examples, and doing your homework will be on your own schedule but attendance at weekly critiques is mandatory.

Don't hesitate to reach out if you have any questions at all! Better to ask a question than be unsure of something. I also really (truly!) want to hear from you all on what is working and what's not in the online format. I can't know what it's like to be on your end of things unless you tell me, so please do!

ATTENDANCE AND PARTICIPATION

Because this class will cover so much technical material, and because our process of critique is collaborative, on-time attendance is required unless you are currently outside the US and the time difference makes 11am EST difficult. Class meetings will be recorded so you can look at them asynchronously; most technical tutorials will be available as videos as well, though we may go through extra material in class.

During our time online together, we'll critique homework projects, have ideation sessions for projects, look at historical and contemporary artworks, and go over technical examples. For this to work, you should be as actively engaged as possible and class participation is part of your grade. This can take a range of formats: asking questions, giving feedback on projects, and participating actively in breakout rooms. That said, I totally understand that everyone's home situation is different and some weeks you might not be able to participate fully. The chat is an awesome alternative and I encourage you all to make use of it. Turning your camera on is not required but makes a huge difference for the entire class, if you can.

It should go without saying, but if you or anyone in your family gets sick please let me know right away and we can work out an arrangement. The same applies if you have the responsibility to care for an elderly family member or other obligations this year that make coming to or participating in class difficult.

HOMEWORK

Homework in this class is meant to be exploratory, a way to expand on the experiences and ideas in class. But, unlike studying for tests, projects require considerable engagement and thoughtful work on your own. I encourage wide-ranging interpretation of assignments: consider ways that you can complete the project that are creatively and intellectually exciting for you, not fulfilling the basic requirements. (That said, some assignments will have restrictions on them – these kinds of constraints can spur creativity, so embrace them!)

Due to the challenging nature of this academic year, due dates for assignments are a goalpost not a requirement: all late work will be accepted for full credit up until the final critique. We cannot critique late or unfinished work. However, turning in work (even if not fully done) on time will help you stay on track. If you find yourself getting behind, please reach out to me and we can discuss.

Details of projects will be available on the class Github page (see link on the first page of this syllabus) including how to turn them in, what's to be included, etc.

GRADING

The goal of all assignments is for you to think and make. Everyone comes from different backgrounds and experience, so I'll be looking for improvement, curiosity, engagement, and a willingness to experiment more than mastery of a technical skill or idea. However, as an intermediate-level class, I expect you to dive in, take on

challenges, and push your skills and your work. A grading rubric will be provided with each assignment to help you understand what is expected and how well you did.

Final grades will be determined as follows:

- Homework: 70%
- Class participation: 15%
- Final project: 15%

LEARNING ACCOMMODATIONS

The goal of this class is for everyone to succeed. Stevens and the VA&T program are dedicated to providing appropriate accommodations to students with documented disabilities. The Office of Disability Services (ODS) works with undergraduate and graduate students with learning disabilities, attention deficit-hyperactivity disorders, physical disabilities, sensory impairments, psychiatric disorders, and other such disabilities in order to help students achieve their academic and personal potential. They facilitate equal access to the educational programs and opportunities offered at Stevens and coordinate reasonable accommodations for eligible students. These services are designed to encourage independence and self-advocacy with support from the ODS staff. The ODS staff will facilitate the provision of accommodations on a case-by-case basis.

If you have any questions about learning accommodations, please don't hesitate to talk with me during or outside of class.

PRONOUNS

As this course includes lots of interaction between students, it's important for us to create an environment of inclusion and mutual respect. This includes the ability for all students to have their chosen gender pronouns and chosen name affirmed. If the class roster does not align with your name and/or pronouns, please inform me of the necessary changes.

Note! You can also go to Edit Profile on Zoom and change your display name and add pronouns. If your professor has enabled it, you can also change your display name during a meeting by clicking the little dot-thing next to your video.

INCLUSION STATEMENT

Stevens and the VA&T program believe that diversity and inclusiveness are essential to excellence in academic discourse and creativity. In this class, the perspective of people of all races, ethnicities, gender expressions and gender identities, religions, sexual orientations, disabilities, socioeconomic backgrounds, and nationalities will be respected and viewed as a resource and benefit throughout the semester. Suggestions to further diversify class materials and assignments are encouraged. If any course meetings conflict with your religious events, please do not hesitate to reach out to me to make alternative arrangements.

REQUIRED MATERIALS

Required and suggested readings will be provided as PDFs on GitHub – there is no required textbook.

- A reliable webcam, either built into your computer or an external one. You may want to consider purchasing an external webcam for class projects anyway. I suggest the Logitech C920 (though at $80 it's kinda spendy). Logitech also offers their BRIO camera, which does 4k video (but is $200). For a barebones but manual focus model, the ELP camera is a good choice though the picture quality is not as good.
- A notebook or sketchbook for taking notes, figuring things out, and ideation.

COURSE CALENDAR

Please see the course Github page for the most up-to-date version of the course calendar.