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## **Venus Turning: Learning Computational Creativity**

What is my relationship with programming? In early fall last year, my answer to this question would be simpler: “I have close to none”. But after a year in the Computation Arts program, I have realized that even prior to learning anything about programming, technically and theoretically, I was already in the midst of a lifelong relationship with it. Programming, like many fields, is the joint effort of humans in the past to create quotidian modern-day tools.

While I sit here writing on word processing technology, hundreds of years ago people like Henry Mill dreamt of typing as I do (Hubert 1888, p.2). The 1999 release of Microsoft Word, the software I am using to type resulted in both intense awe and backlash (Kirschenbaum 2016, p. 236). This historic continuum within itself is a beautiful and complex collective programming story that I take part of day to day.

As a creative tool, programming perplexes me, it is amazing that simple binary has been converted to ever-expanding projects. As I watched the “Mother of All Demos” and subsequently read the Augmentation Research Center’s description of their goals (Engelbart 1968), I felt extremely moved and found the designing process to be beyond creative. I believe creative aspects of programming are now considered tied to the audiovisual impact it can produce. This is possibly due to how normalized our other functional experiences with it are.

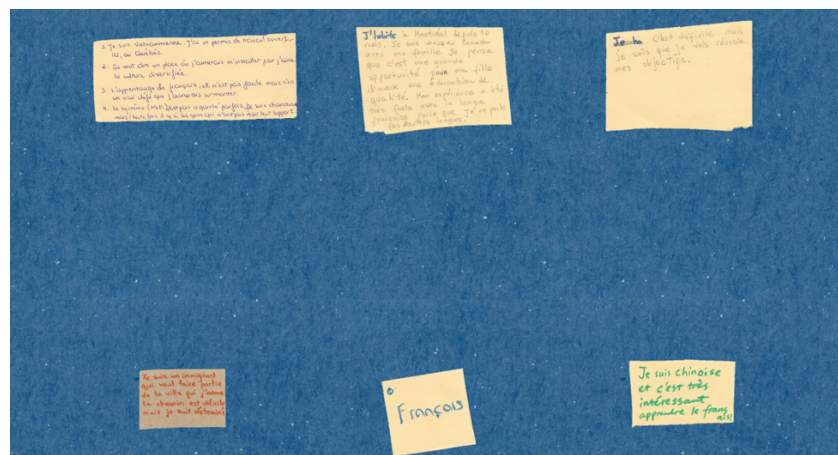
However, change is fast occurring and this is evident as the age of computational creativity is close to its peak; with AI passing both the older benchmark of the Turing test (Turing 1969) and the newer requirements outlined by the Computational Creativity Conference Steering Committee (Jordanuos 2014). Perhaps slowly our audiovisual appreciation of computation will diminish as the usage of AI becomes more normalized.

My technical and creative experience with programming is less vast than my newfound philosophical and emotional connection to it. Over the span of 2023-2024, I built two websites. One of which was for the CART211: Creative Computing and Network culture class. I took the opportunity to create a website which introduces the raccoon to the viewer (Rezaee, 2023), featuring mostly my own visual artistic work inspired by the combination of the early internet and painterly impressionist styles. I found it easier to begin thinking creatively if the project included things I liked. I look back at the raccoon project in a fonder manner.

However, my second site is an ongoing endeavor, it is a site about immigration (Rezaee 2024). While I am passionate about the subject, I started it for a project from SCPA 301 in 2023-24. I did not enjoy the experience and no longer feel connected to it due to personal difficulties during the course. Despite this, I want to finish it, the notes I collected to archive sit at my desk waiting for me.



Screenshots from my raccoon game site (taken 2024)



Screenshots from my immigration website (taken 2024)

Due to the modern perception of computers as factual and unfeeling, it is hard to realize that the motivation and emotions that go into coding are just as deep and complex as any other artistic tools. It is just easier to commodify and capitalize off this artform. I am currently less interested in functional coding like websites and more inspired by coding for interactive and experimental visual effects. My inspirations for this include:

- Hadi Jamali's Serendipity

Jamali's usage of traditional elements, HCI (Human Computer Interaction), and immersion was beautiful to witness in real life. Evan Montpellier had to program the work to respond to movement, creating the possibility for the full immersive effect. Montpellier states that he used Kinects and OpenCV to do this. (Jamali 2023). Movement based works can sometimes feel underwhelming and repetitive, however the narration and concepts behind this were culturally sound, allowing it to remain unique.

- Before Your Eyes (Goodbyeworld 2021)

The concept behind this game, detecting your blinking as you play, inspired me to think of the future of HCI in art in a deeper manner. Programming innovatively and accounting for variability made the liminal feelings associated with gameplay in this possible (Maher 2021). It is creative not only in its usage of new technology, but its combination of psychological and narrative tools.

- Shirin Neshat's Fury (Neshat 2022)

I saw this in person and was extremely touched. This project uses two screens and a VR headset, for both of these sections, programmer Peter Fisher is essential to the work as he must ensure the smooth running and visually immersivity of the project. Fisher stated that he works closely with contemporary artists to ensure their visions come to life (Kentbye 2023). With his visionary abilities as a creative programmer, Fisher creates the ability for the artist and viewers to meet in a third space wherein we are almost present in her mind.

The highest level of inspiration to me however, is those who dreamed of today, without any visualized inspiration in front of them. The Ada Lovelaces and Maria Mitchells of the world who embodied technology itself. Having the ability to think of Venus turning, and deciding to calculate something which has never been done before. Thus, functionality is still an end goal for me as I think it adds a great deal to the collective computation pursuits.

While I wait to find the gap I would like to fill, I imagine smaller projects that contribute to a collective, like finishing my immigration website. For visual projects, I want to create painterly interactive artworks which implement traditional elements to preserve them in the digital realm. Diverse cultural elements and oral tradition are always a great addition to contemporary art. This is probably achievable throughout this course.

I would also like to create more localized archives. In my limited programming imagination, I see a software with a map where users can collaboratively upload neighborhood photos of Iran. Unlike many other countries, local history is not well preserved and of course google street view is banned, there is no comparative archival method for people to feel nostalgia about.

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