

# Critical Studies: Computational Thinking and Creative Practice

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## Week01

### Personal view of computational thinking

As a student with industrial design background, I have always been used to solving problems with design thinking. In general, this is to do research to find requirements, and then come up with design goals. After that, use some thought management tools for creative output, and finally converge the idea to a conceptual solution. This problem-solving process worked well for most of my undergraduate career, and I had a great time working with my classmates (all of the same major) until I met a group of people who were completely opposite to us - programmers during my internship as a product designer. I've found that they tend to ignore the creative conceptual solutions that I value most in favor of whether an action is clearly defined, or does a design make sense. It is very struggle to communicate with them because of different thinking way. This is probably how computational thinking first hit my brain.

As I continued to communicate with this group, I realized something interesting -- they thought that all design must be clearly defined, even in the smallest detail. They believe that a feature is better implemented in simple code than in complex code. (to some extent, this is very similar as *less is more*.)

This is one aspect of my understanding of computational thinking. Another aspect of my understanding of computational thinking comes from the increasing number of digital and intelligent art works appearing in various art exhibitions. This is a completely different feeling from the programmers I know. They incorporate technology and computational thinking into their own critical and reflective design. Some meaningful symbols are parsed and compiled by carefully designed algorithms to generate symbols with new meanings. This process fascinates me because there is so much to explore, both in the digitization of artistic expression and in the digital society and human civilization involved in creative issues. That's why I decided to apply immediately after I saw the description of CCI.

### What I am looking forward to in this year

Therefore, I am looking forward to learning the theories and skills of creative programming and computational thinking in a creative and practice-oriented way during the one-year study at CCI. Therefore, I am looking forward to learning the theories and skills of creative programming and computational thinking in a creative and practice-oriented way during the one-year study at CCI. During this year's study, I hope to create some interesting and meaningful interactive devices or make some generative art works by using AI technology. Of course, this is only my current idea. Since I never label myself, I think my idea will change repeatedly in the future study. But I don't think it matters. Because human cognition is always raised with spiral. In a word, I am looking forward to this year's study!

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