

## Self-Evaluation Essays

Luca Geyhianaryan

During this semester I have completed and submitted three main essays: "What is System Engineering", "Computer Architecture", and "OS Architecture". Each of them helped me understand better how the parts of computing connect and work together. I plan to rewrite them later to see how my understanding will change by the end of course.

Right now, I am preparing the presentations and video-recorded explanations for these essays. They are still in progress but I am planning to finish them soon. I also want to create artistic versions of these topics. My idea is to express some of the main concepts visually or through animation, to make them more creative and easier to understand.

For the programming assignment, I worked in several languages - JavaScript, Python, C++, Lisp, TCL, and LUA. In each one I created a mathematical solver and recorded a video explaining the process and the logic behind my code. This helped me to compare how similar problems can be solved using different syntaxes and programming styles, and improved my technical confidence.

In the demoscene part, I experimented with C++, Python, and JavaScript. Together with Dusine, we created a demo called "Aurora Sky" using JavaScript and HTML. With Vahan, we developed another project that consisted of two interactive coolers: one where the screen is divided

by a coordinate system and the user can choose colors to change parts of a picture, and another where the user can write a mathematical function, and it will be drawn by pixels. The program supports around thirty different functions that can be visualised this way. I also created several demos scenes by myself I worked in different programming languages and tried various functions to generate different visual effects. I experimented with how shapes, colors, and movement can be formed through code. After finishing them, I uploaded my demo scenes to the server along with my other assignments. These projects helped me better understand the creative side of programming and how code can be used not only for logic but also for artistic expression.

finally, I successfully uploaded my finished assignments to the OrangePi server using the SCP method, following the instructions.