For my final project I will cover the topic of pattern recognition as a generic technology.

**Analogous case studies (Which past technologies or historical cases might be relevant?)**

Pattern recognition is an automated recognition of patterns and regularity in large data sets. Still in its early stages of development, pattern recognition is a category within machine learning and it is being used for extraordinary things such as self-driving vehicles, image processing and unlocking your computational devices with your face ID. One of the earliest cases of pattern recognition is an algorithm that was implemented in 1967 called K nearest neighbour, which is used to map routes.

**Research program mapping (What kinds of R&D are going on now that relate to your technology? Where is this happening?)**

Research and development for pattern recognition is being applied in a wide range of fields, in the self-automotive industry companies like Nuro and Aurora are developing softwares for Google and Tesla. Anduril technologies is a company that develops threat detection systems using data from towers, drones and vehicles.

**Communication and early warning (How could you find out what the public thinks, knows, and feels about your technology?)**

This is a difficult question to answer since the implementation of pattern recognition is extensive and it is still early on in its development.

**Technology assessment and choice (What kinds of exercises or activities have brought or could bring researchers/experts and the public together with respect to this technology? Could computer scientists or engineers be a part of this process?)**

Computer scientists and software developers offer their implementations in many fields of study. Pattern recognition can be implemented in softwares to help protect human lives. Alongside biomedical researchers, pattern recognition can help analyze test results in decision support for any illness. Our police departments use pattern recognition softwares to analyze ballistics to help find the perpetrator. These technologies help facilitate many processes in our everyday lives, R&D will only continue to grow and the possibilities are endless.