Heureka The Finnish Science Centre
Project proposal for the Aalto University Product Development Project course
11.9.2020

Background
Heureka The Finnish Science Centre introduces the public to science and technology in an engaging and interactive way. Heureka has annually in average almost 300 000 guests half of whom are children. Heureka inspires discovery and participation. Our vision is to have the most entertaining way to get excited about science, to learn and to spend time together. Heureka is a non-profit-making organization

Project description
Heureka is planning a new interactive science exhibition about artificial intelligence and robotics for its premises. This Intelligent Machines is the last of intelligent technology exhibitions trilogy. Previous exhibitions were Intelligent Traffic and Intelligent City. It will be opened in April 2022. Our project proposal include two exhibit options for this exhibition, one of which is chosen for implementation

Option 1 - Kinetic Sculpture - Communicating artificial neural networks through design
Taking inspiration from kinetic sculptures of Alexander Calder, Theo Jansen and Daniel Rozin, the fun of Rube Goldberg machines and vividness of Pachinko machines, we want to create Kinetic Sculpture resembling artificial neural networks. The purpose of the sculpture is to amaze, teach and entertain visitors about artificial neural networks and how they work.

The space allocated for the sculpture is approx. 10 meters in height and 2 x 3 square meters. Skills needed on this project vary. Understanding interactions, user interfaces, machine technology and some coding is required. Knowledge of science popularization and concepts are a big advantage. You don't have to be familiar with artificial neural networks, yet.

https://www.youtube.com/watch?v=lWlGo2FOaJk Rube
https://www.youtube.com/watch?v=-tBy2jemw4s Pachinko
https://www.youtube.com/watch?v=fI5PRaTSMUI Calder
https://www.youtube.com/watch?v=3ZePhxfXlns Jansen
https://www.youtube.com/watch?v=kV8v2GKC8WA Rozin