Artist Statement:

My art practice explores the relationships between art and technologies in the contemporary art world. This is an interactive installation of a “cyborg plant” (the combination of organism and robot) running on the space. It attempts to explore the topic of virtual content, human, machine, and networking. The main contribution of this project including i) presented a hybrid physical and virtual object through a cyborg plant, ii) explored an interconnection between human, machine, and virtual content displaying on the device through Internet-of-Things framework, iii) innovated an interaction method between physical and virtual elements, iv) applying painterly, unique, and artist related texture on the everyday objects. As the audiences/users of this project, they will hold a custom device with custom apps to view and interact with the “virtual cell” and the “cyborg plant.” By opening or closing the mouth and both eyes, audiences/users are able to control the direction and movement of the “virtual cell” displaying in the AR screen, and the behaviors of the “cyborg plant” will be affected by the position of the “virtual cell.” The goal for the users is controlling the “virtual cell” to “guide” the “cyborg plant” to reach the “virtual water,” once the “cyborg plant” reach the “virtual water,” it will display colorful particles to create a happy scene.

The title of this work attempt to immerse the audiences’ imagination in a futurist scene, telling them this is an adventure to explore the possibility of what our society will be in the future. The project presented both serious and humorous. The topic of the project is serious for audiences to critique the possibility future and the interaction between human and devices is humorous by face controlling. Both the apps running on iPhone and iPad are made in Unity. On one hand, iPhone X are able to capture the human face in three-dimensions, and I use ARkit to acquire the data of the open and close states of the month and eyes. On the other hand, Vuforia is used for scanning the 3D “cybord plant” and applying virtual eyes on it, as well as visualized the “virtual cell” on the AR scene. There are two controlling logic on the system to determine the movement of the “virtual cell” and the “cyborg plant”. When opening/closing month will control the “virtual cell” go straight/stop, and the closing of right/left eye will affect its direction. Additionally, there is a Ray Detection on the virtual eyes of the “cyborg plant”. If the Ray detect the “virtual cell”, the “cyborg plant” will go straight, otherwise will rotate. These is a server host the interconnection by sharing data between the devices and the robot.

The inspiration of this project is from “Exploring a Mixed Reality Framework for the Internet-of-Things: Toward Visualization and Interaction with Hybrid Objects and Avatars”, which is a research I work in Adaptive Context Environment (ACE) Lab as a research assistant with Dr. Alexis Morris. For expanding the concept of “hybrid object”, this project applies the virtual elements on the physical object as unities, instead of a separate Avatar represent the physical one. Additionally, the “cyborg plant” is the embodiment of Donna Haraway’s “﻿A Cyborg Manifesto”, addressing “﻿A cyborg is a cybernetic organism, a hybrid of machine and organism, a

creature of social reality as well as a creature of fiction”. As I mention above, “cyborg plant” is the combination of robot body and organic plant, and this can be extended into human body in future project. Moreover, the presenting of “millions of brightly colored plastic wholesale items sold in Chinese superstores” in Mika Rottenberg’s “Cosmic Generator”, is the inspiration of the texture I applying to the “holder” and the body of the “cyborg plant”. As my understanding, the “millions of brightly colored” in my project presented the inclusive future of human society, and accessibility for Children, Disability, Elder, etc.