ECE 1050 - INITIAL INTEREST SURVEY

Yinhao Qian

August 31, 2022

I'm a rising Computer Engineering senior with extensive knowledge on software/hardware programming in fields such as mobile-app development, embedded systems design. I would be more interested in the topics with heavy focuses on **computer programming**.

1   FIRST CHOICE - DOG ALERT SYSTEM

The dog monitoring device and be treated as an embedded system. I am able to design or refine the internal API of the device. Using programming languages like C or VHDL, I can design the system as per the requirements of the sponsor.

2   SECOND CHOICE - KENSINGTON E-LOCK

Although I'm not able to provide any creative ideas for the physical designs of the lock, I can however think of a second-layer protection where an embedded system and the connected laptop will communicate with each other, and once the connection is lost then it will triggers the alarm to go off. (That's just an idea of mine, but I can do anything programming-related).

3   THIRD CHOICE - CARDBOARD ALTERNATIVES FOR CONSUMERS

I saw the word **system** and immediately thought of system engineering. I am able to process visualize data using MATLAB. However, I'm not too sure if I can do anything other than that for the rest of the project (consumer inquiry, etc...)

Correct me if I misunderstood any parts of the mentioned projects, since I missed the first lecture.