**Turing Tests for Specific Fields of Expertise**

A domain-specific Turing Test is a method for backing up or refuting a claim that a computer system (hardware/ software combination) is “intelligent” in a specific domain or field of expertise. For example, in medicine, a Turing test might involve a panel of human doctors who pose a series of questions to the computer system and to a human doctor, and on the basis of the answers, try to determine which answers are from the computer and which from the human. If the computer gets more votes for “human” than the human, it passes the test.

1. Choose a field of expertise that interests you. It could be It could be your major, but it does not have to be. (Maybe consider subjects such as organic chemistry, electrical engineering, mathematics, classical music, etc.)

[If you are using Word, or it’s otherwise convenient, please enter all your answers in BLUE]\_\_\_\_\_\_electrical engineering\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

2. Explain what a person typically does in a job within this field.

Apply the principles of electricity, electronics, and electromagnetism to develop electrical products and system

3. Explain what parts of this job can already be done by computer.

Simulating circuit design, waves, signal inputs

4. Explain what seems to be BEYOND the state of the art -- something in this field that a computer cannot yet do but might be able to do soon.

Build circuits, prototype embedded systems

5. Describe how a good Turing test would be set up in this field:

a. Who should be the judges? People using the product

b. What kinds of questions would be fair game for the test? Does the circuit/system operate in the same way?

c. What affordances would be particularly important in this field? (Understanding human speech? Understanding a particular notation such as chemical formulas? Machine vision? Ability to perform logical deductions? Knowledge of particular types of facts such as chemical element properties?

Understanding how circuits work, how embedded systems operate

6. Is there any particular "must-have" feature for a computer to exhibit in your field in order to be considered "intelligent" within your field?

Learn how a particular system operates/work in order to apply the same concept for other systems

7. What do you see as the likely progress of AI in this field in the next 10 years?

AI can understand how these systems are built and do similar tasks

8. Get critiques from at least 2 classmates during breakouts...

a. First classmate’s name and email: \_Adit Jha, aditjha@uw.edu\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Classmate’s own topic: \_Software Engineering\_\_\_\_\_ Classmate’s main suggestion for your test: look at how circuits are built

b. Second classmate’s name and email: \_Ravi Sangani, rsangani@uw.edu\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Classmate’s own topic: \_Securities trading\_\_\_\_\_ Classmate’s main suggestion for your test: People using the system/product being the main testers.