

MENG311 English V – Reading Comprehension

Student Name: _____

Student Number: _____

Topic: RF-Pose Answers

Main Idea:

How does RF-Pose work, its applications and future development.

The article describes the RF-Pose system developed by researchers @ MIT (provides information).

1) Can you briefly explain what project “RF-Pose” is about? What is the basic theory/concept?

The system uses artificial intelligence to “recognize” radio signals. Radio signals are reflected off people’s bodies in a room, and collected using wireless sensors.

2) What are three potential applications for RF-Pose mentioned in article?

Possible applications include: search and rescue missions, healthcare, and video games.

3) How are artificial intelligence and neural networks used in RF-Pose? Can you describe?

Once the signals (data) are collected, the neural network is “trained” to recognize these signals. This is accomplished by using camera images to create stick figures. The system is “taught” to recognize the signals with the corresponding stick figures’ actions. After training, the system is able to distinguish a person’s position and movement solely from the radio signals.

4) For future applications, what can researchers do to protect the privacy of users?

The team plans to implement a “consent mechanism” which allows the person (subject) to start and stop the monitoring process.