Assignment 12: Solution Description

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1 System

Use this section to explain at the top-level what your solution system is. Use diagrams, figures, drawings, words, etc to fully explain the system. You might consider using powerpoint, canva, procreate, or other tools to develop your system diagram. My example in figure 1 was made with canva and is for an automatic dog petting machine.

Create as many of these sections as you need.

2 Subsystem 1

Figure 2

3 Subsystem 2

Figure 3

4 Subsystem 3

Figure 4

5 Subsystem 4

Figure 5

Voltage and Current Acquisition Non-invasive detection by measuring magnetic field strength Real-Time Welding Feedback A system that allows welders to see real-time information to enhance quality and efficiency Computation Computer records all inputs, analyzes the data, and determines actions need

Figure 1: Real-Time Welding System Diagram

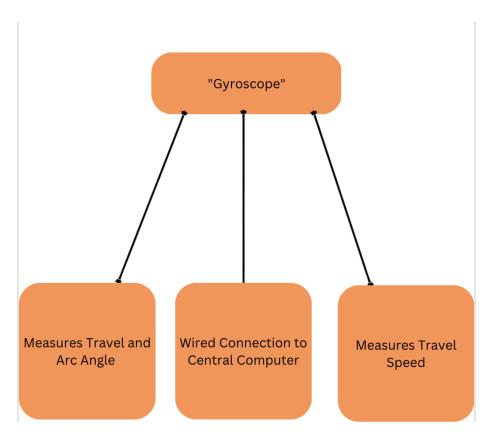


Figure 2: Gyroscope Subsystem Diagram

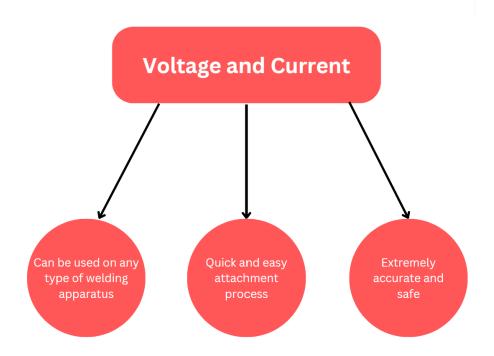


Figure 3: Voltage and Current Subsystem Diagram

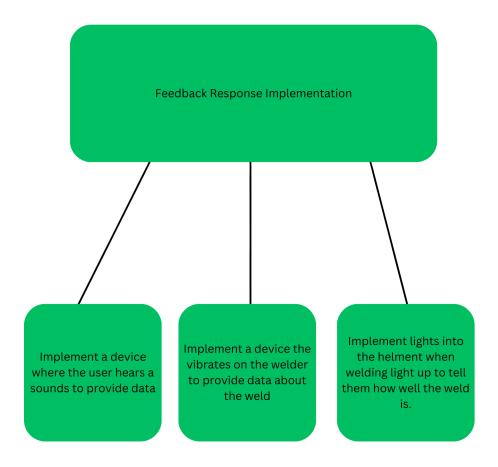


Figure 4: Feedback Implementation

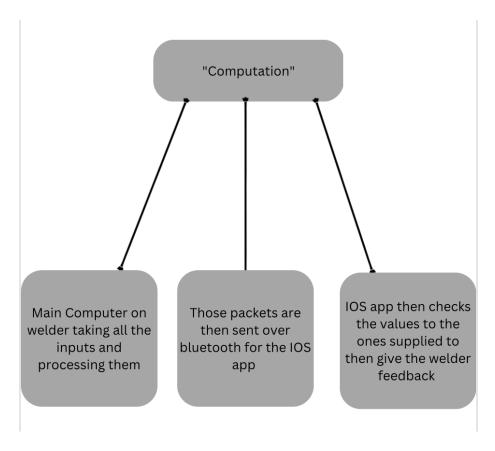


Figure 5: Computation for signal processing