1. Where does Julia Cartwright work?

National Instruments

1. What is PREEMT\_RT? Hint: Google it.

Real-Time Patch – allows for soft real-time performances

1. What is mixed criticality?

Two different types of tasks (in relevance to time sensitivity) – some have real time dependencies and some without

1. How can drivers misbehave?

Due to shared resources between real time and non-real time events

1. What is Δ in Figure 1?

The difference in time between the event occurs and the task responds to the event

1. What is Cyclictest[2]?

A way for measuring the time it takes for something to get schedule – sleeps for a while and compares the difference between the sleep and the difference between the time stamp before and the time stamp after

1. What is plotted in Figure 2?

This is the delays that a program sees (the delta from Figure 1) – green is real time system, purple is normal

1. What is dispatch latency? Scheduling latency?

dispatch latency – amount of time between hardware firing to relevant interrupt firing (giving to schedule), scheduling latency – time from scheduler being made aware of task to the CPU being given the task

1. What is mainline?

Model – x axis is time, main thread executing, interrupt happens, goes to handler, high priority event, the CPU can’t get to it because it is handling the noncritical interrupt

1. What is keeping the External event in Figure 3 from starting?

The low priority interrupt is executing in hard irq

1. Why can the External event in Figure 4 start sooner?

The time associated with waking up the corresponding interrupt handler