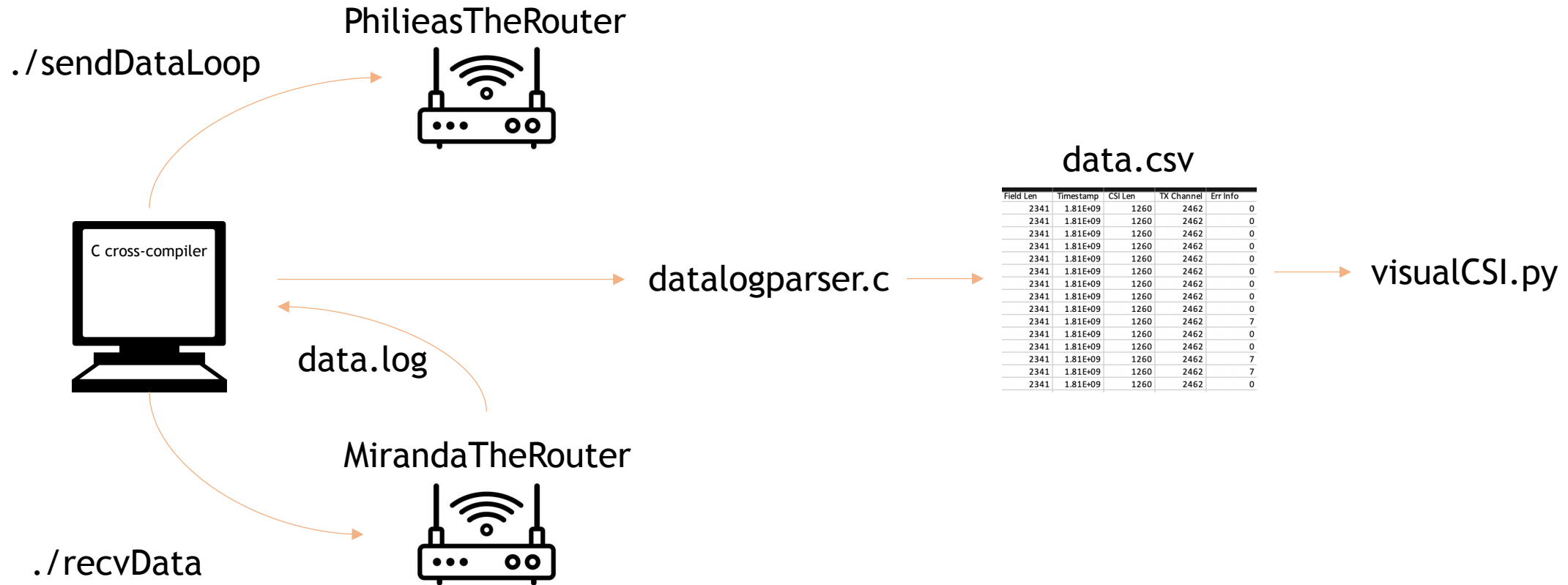


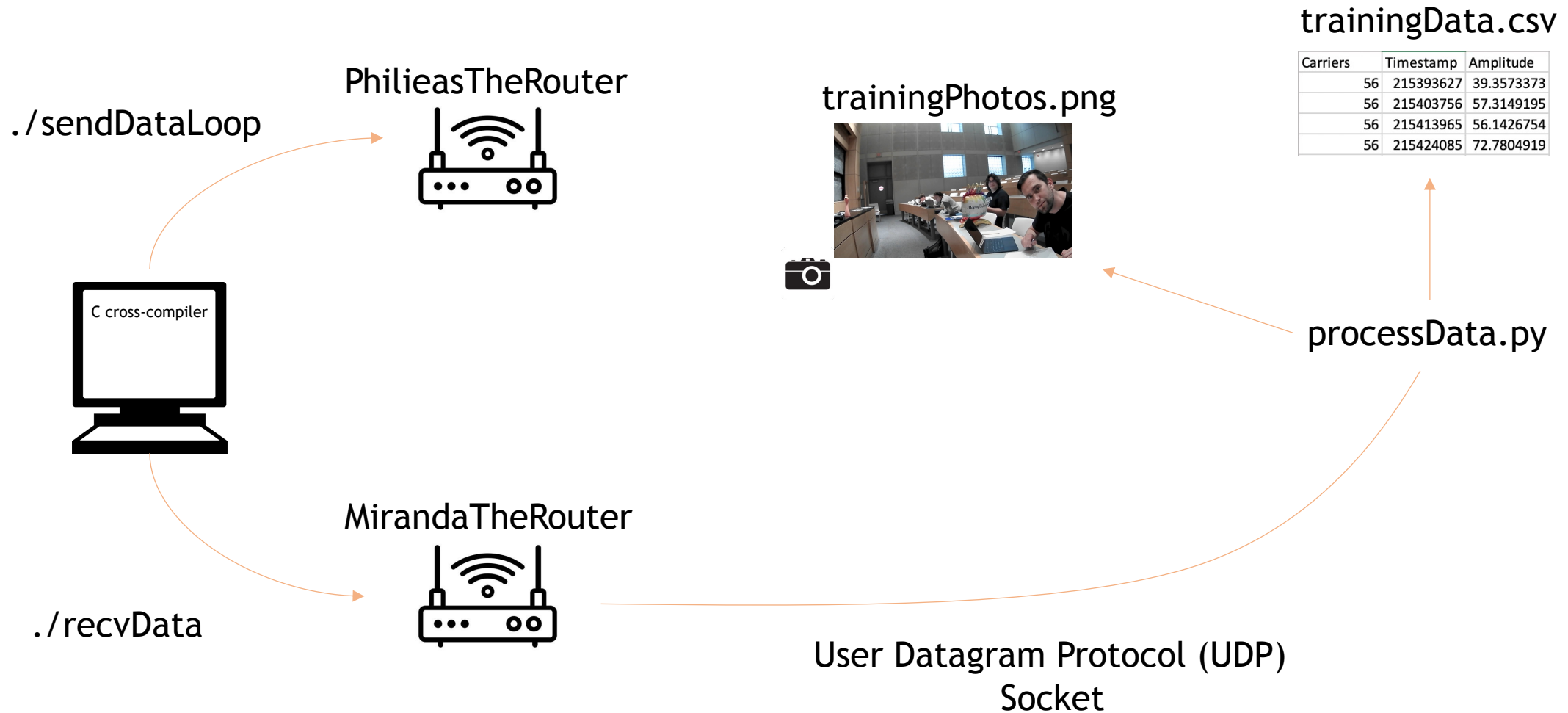
Localization and Monitoring Using Passive RF on the Internet-of-Things (Part 3!)

Advisors: Dr. Bill Mongan & Dr. Chris Tralie
Kacey La

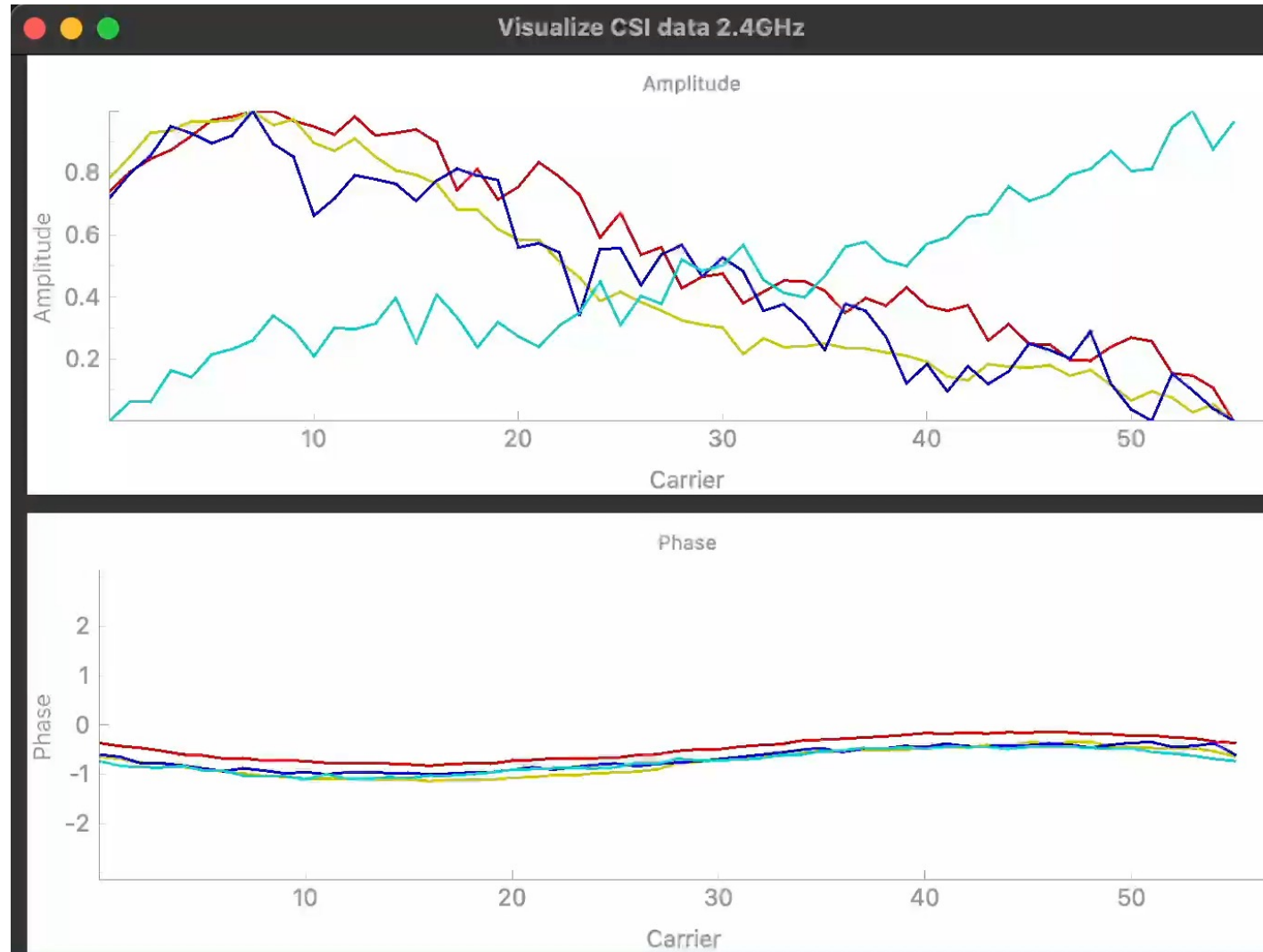
Previous Setup Pipeline



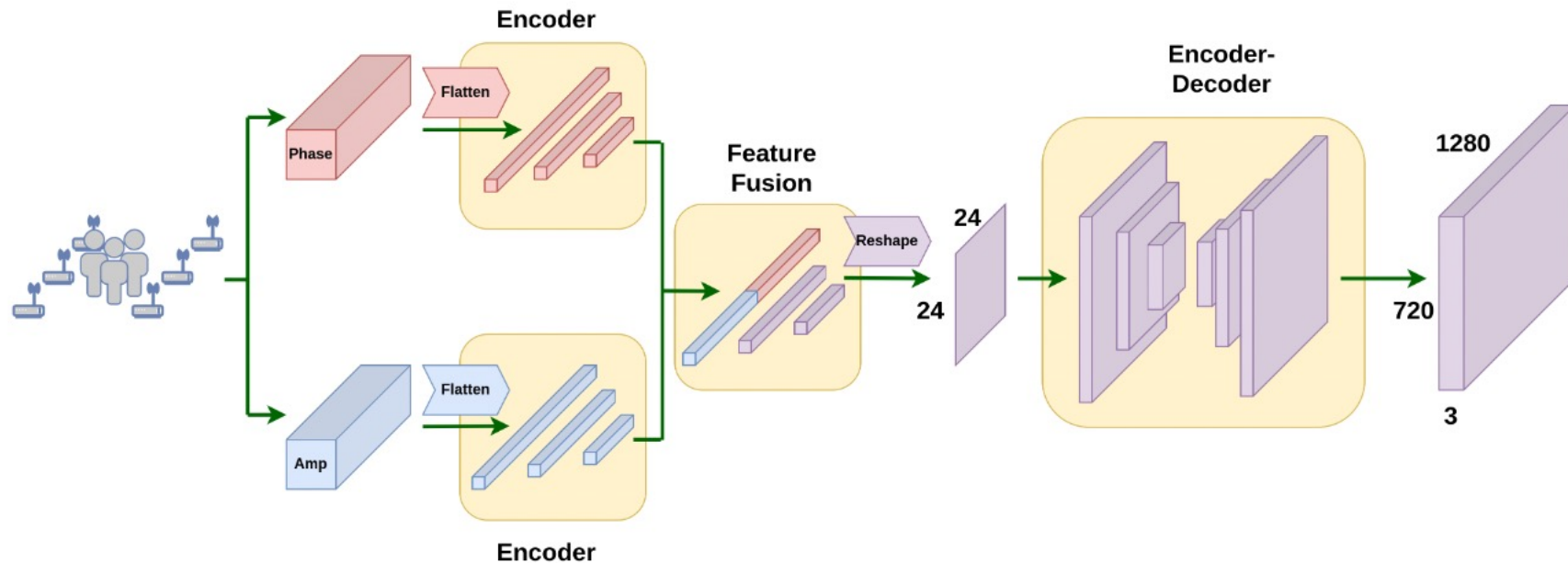
New Setup Pipeline



Experimentation

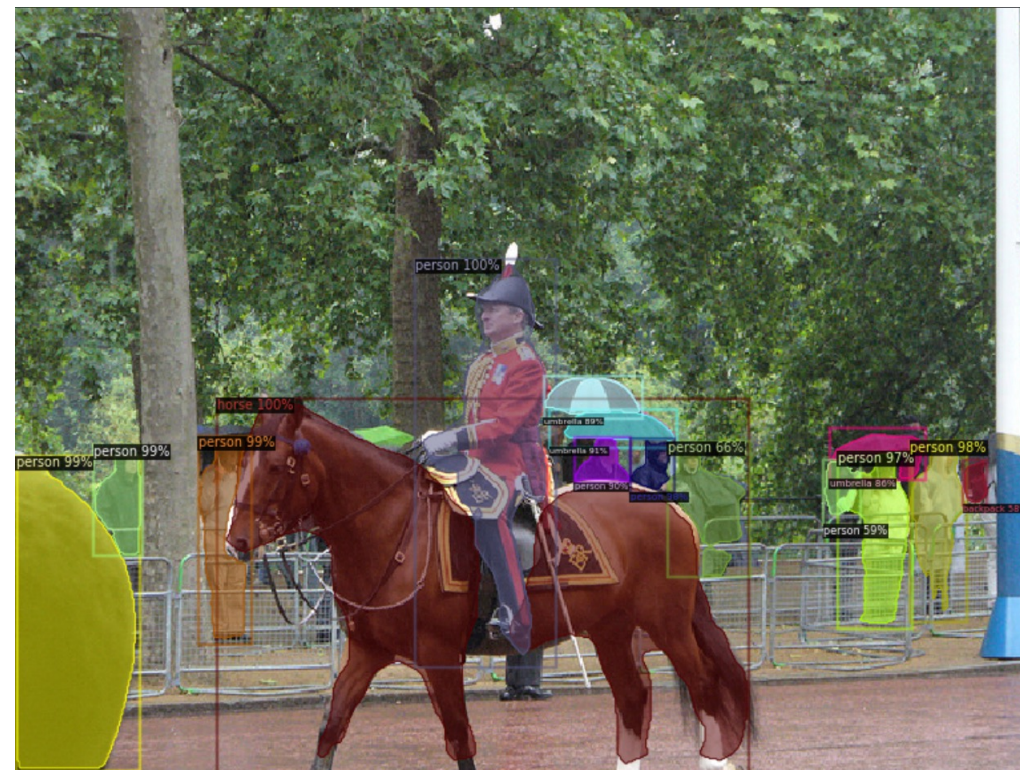


WiFi Densepose Paper Replication (Next Step)



Densepose From WiFi: <https://arxiv.org/pdf/2301.00250.pdf>

Densepose Example



Detectron2: <https://github.com/facebookresearch/detectron2/tree/main>

Densepose Example 2



Detectron2: <https://github.com/facebookresearch/detectron2/tree/main>

Next Steps

- Integrate Densepose into the neural network with WiFi signals as input
- Simpler experiment:
 - Can train a neural network to detect the existence of activity given the WiFi signals as input
 - Detect certain activities?