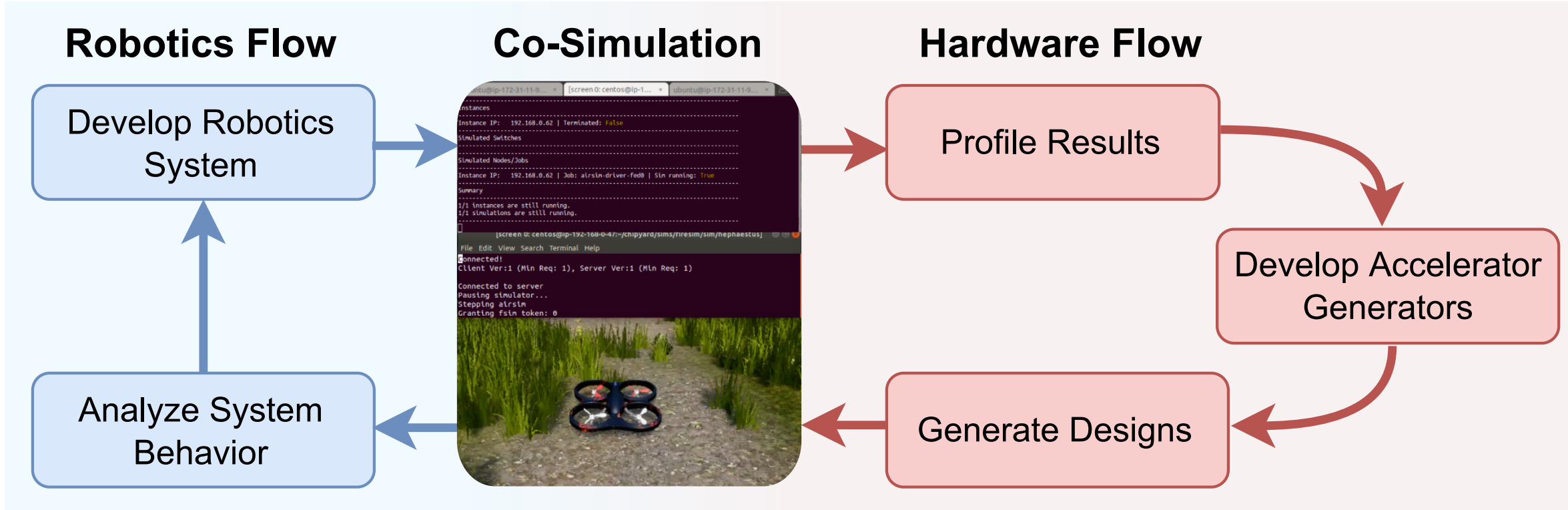


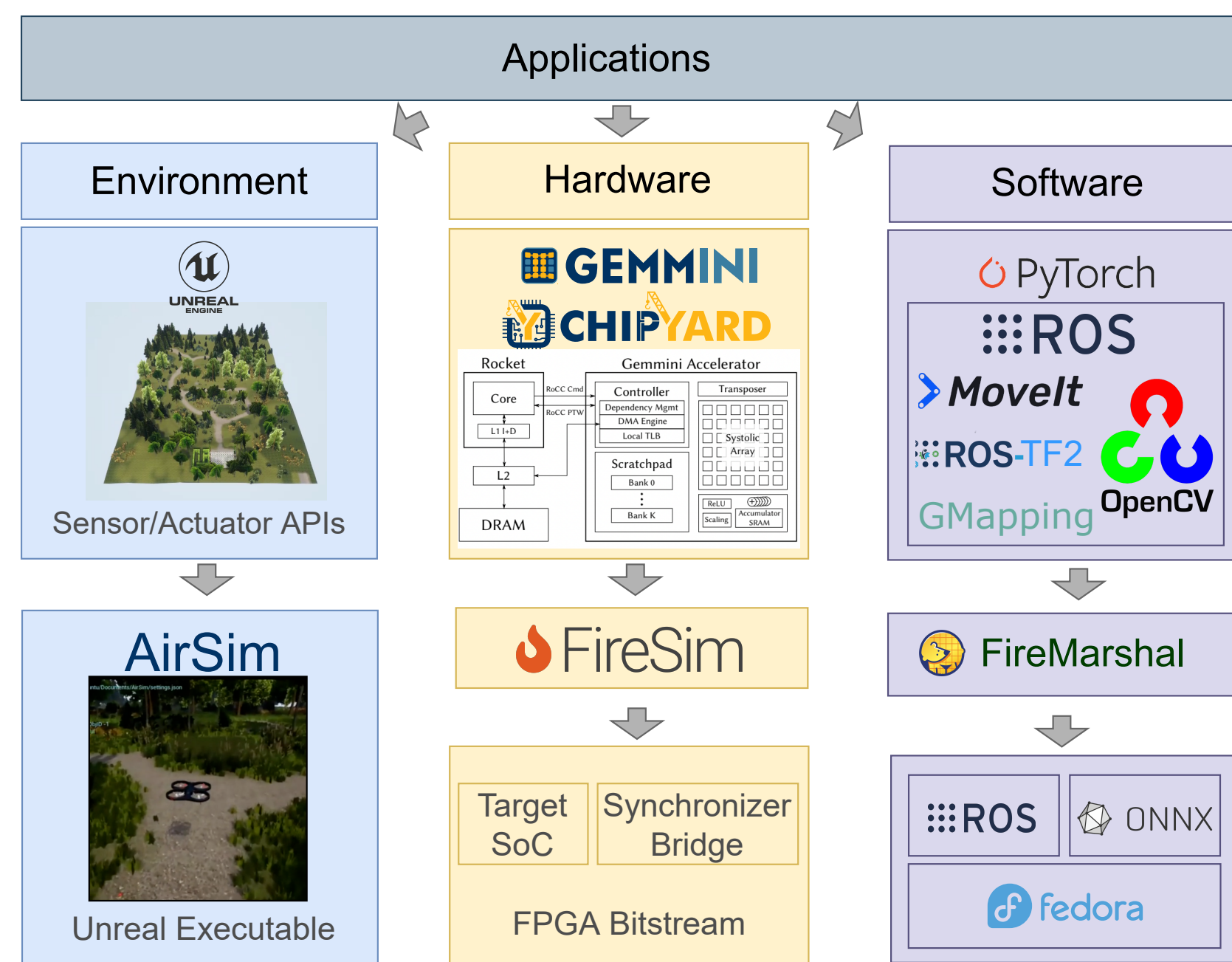


Overview

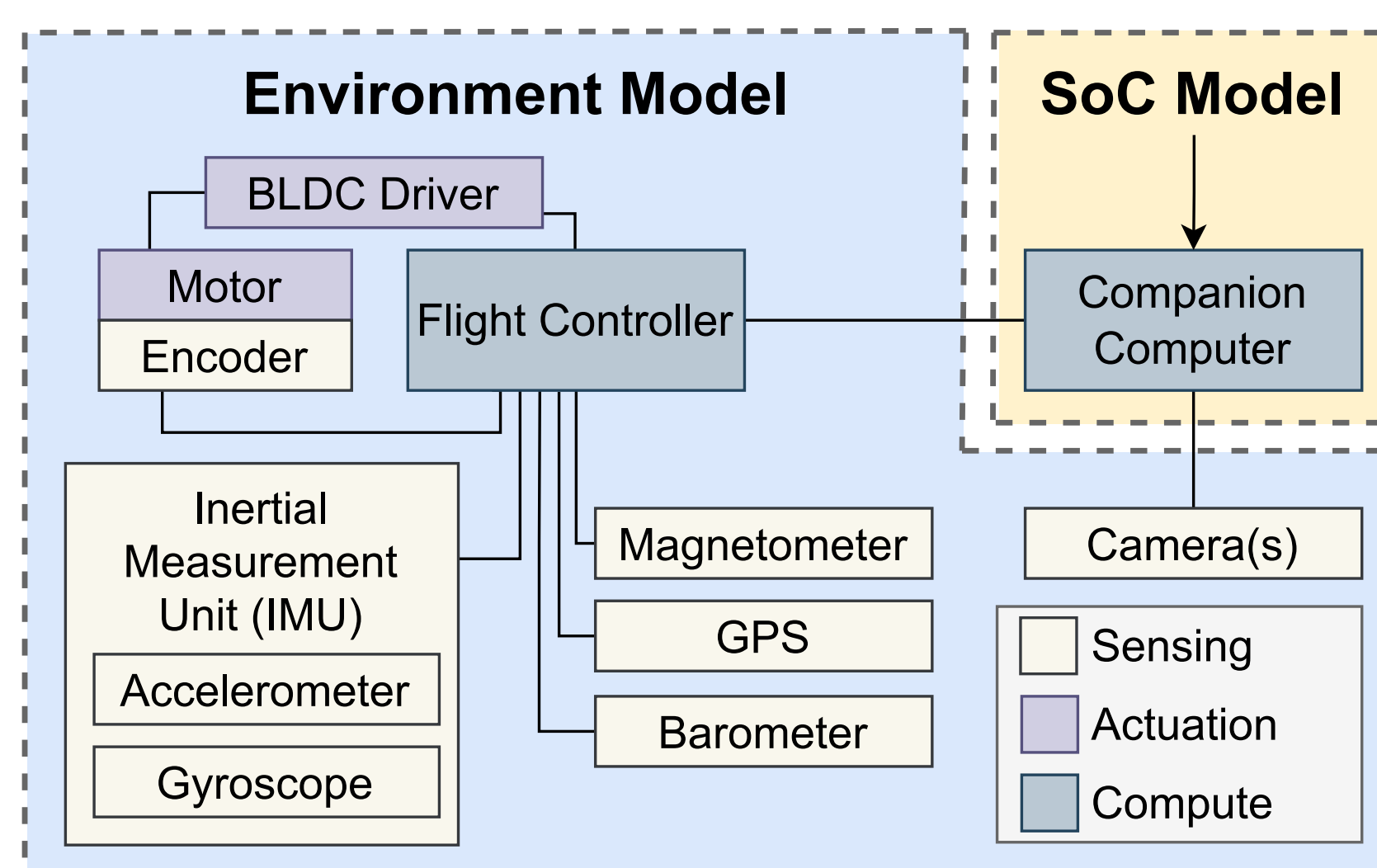
Enable robotics researchers to accurately evaluate **heterogeneous robotics SoCs** running a **full software stack** in **real-world environments**.



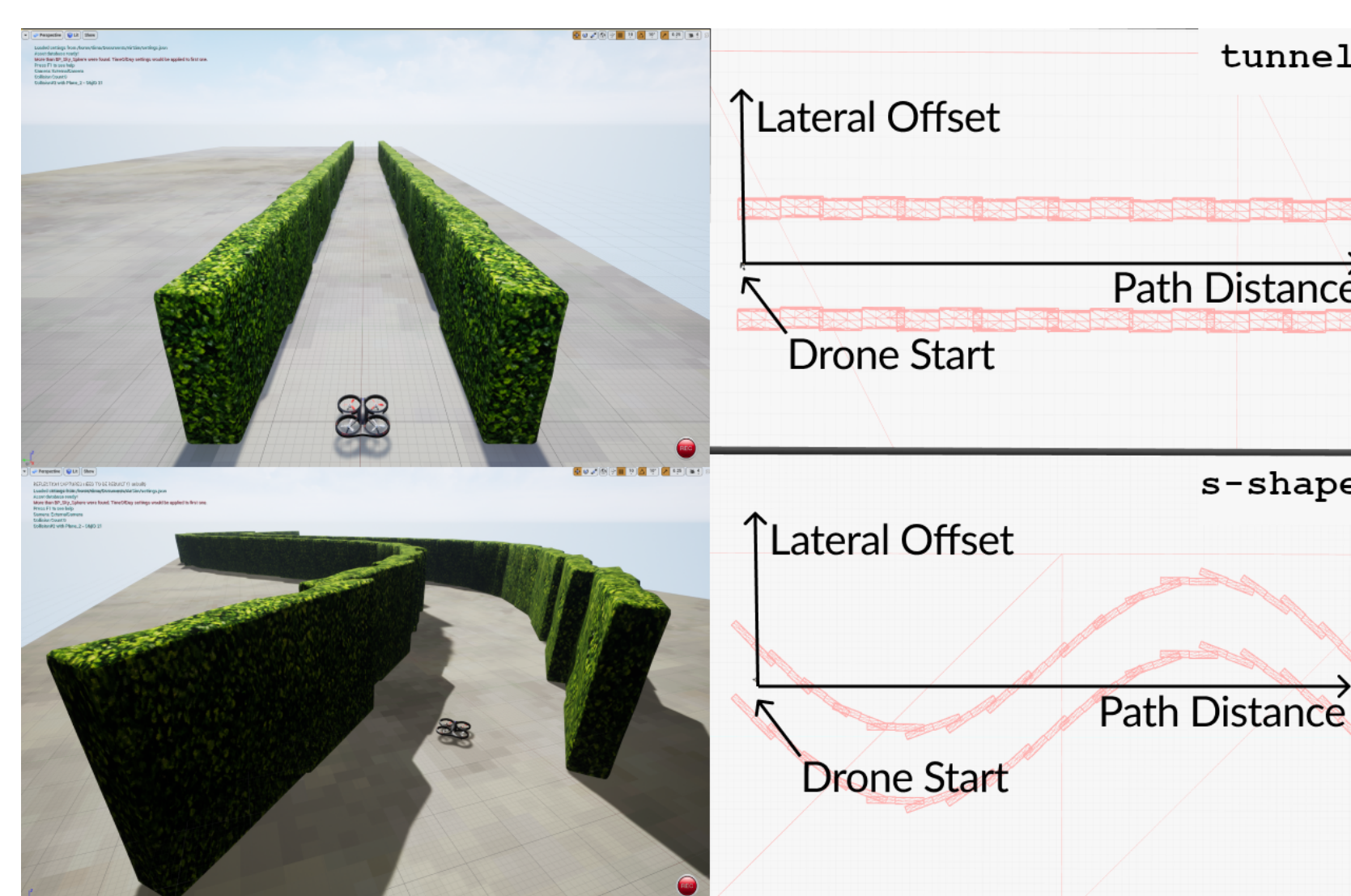
User Flow



System Model

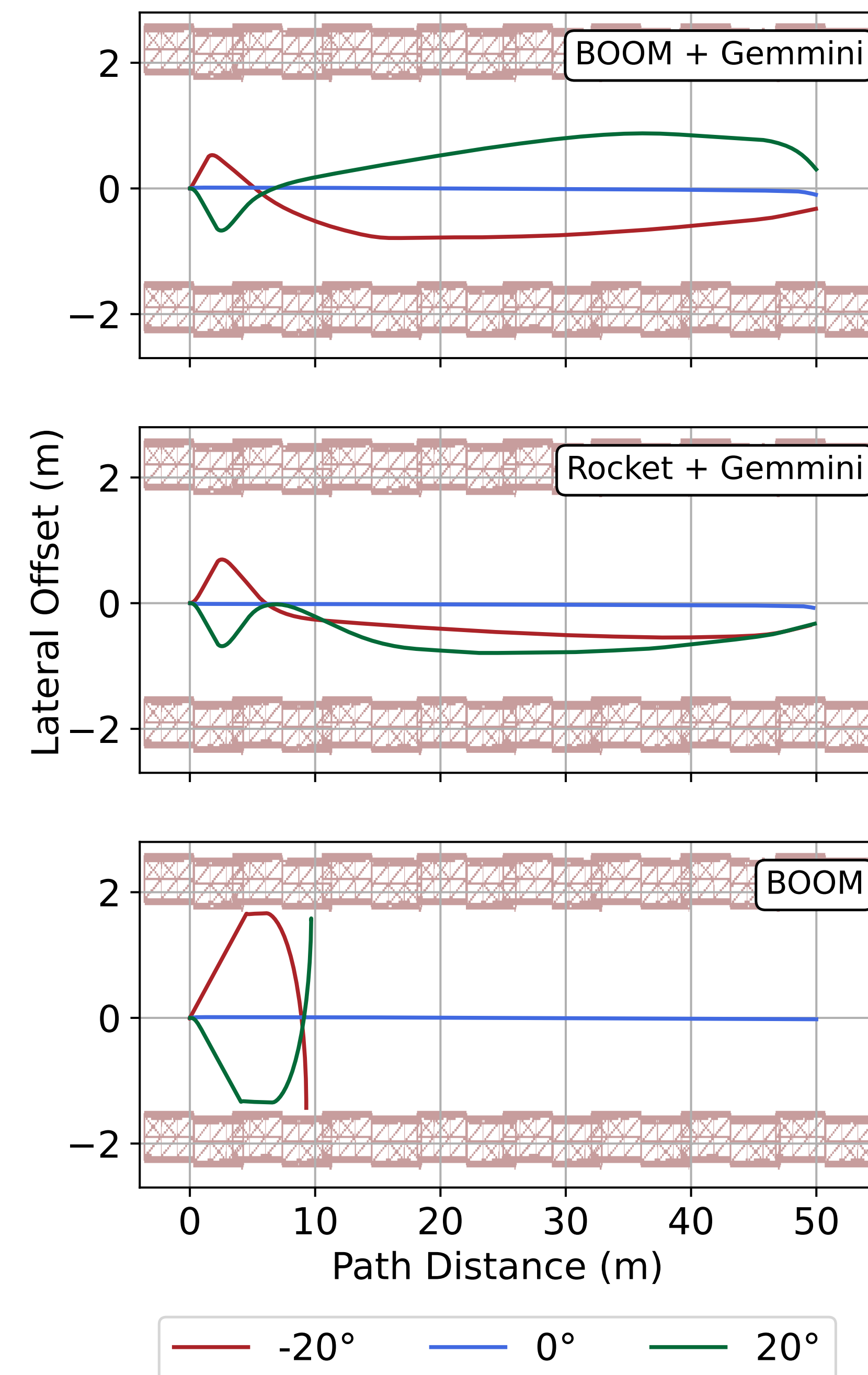


Environments

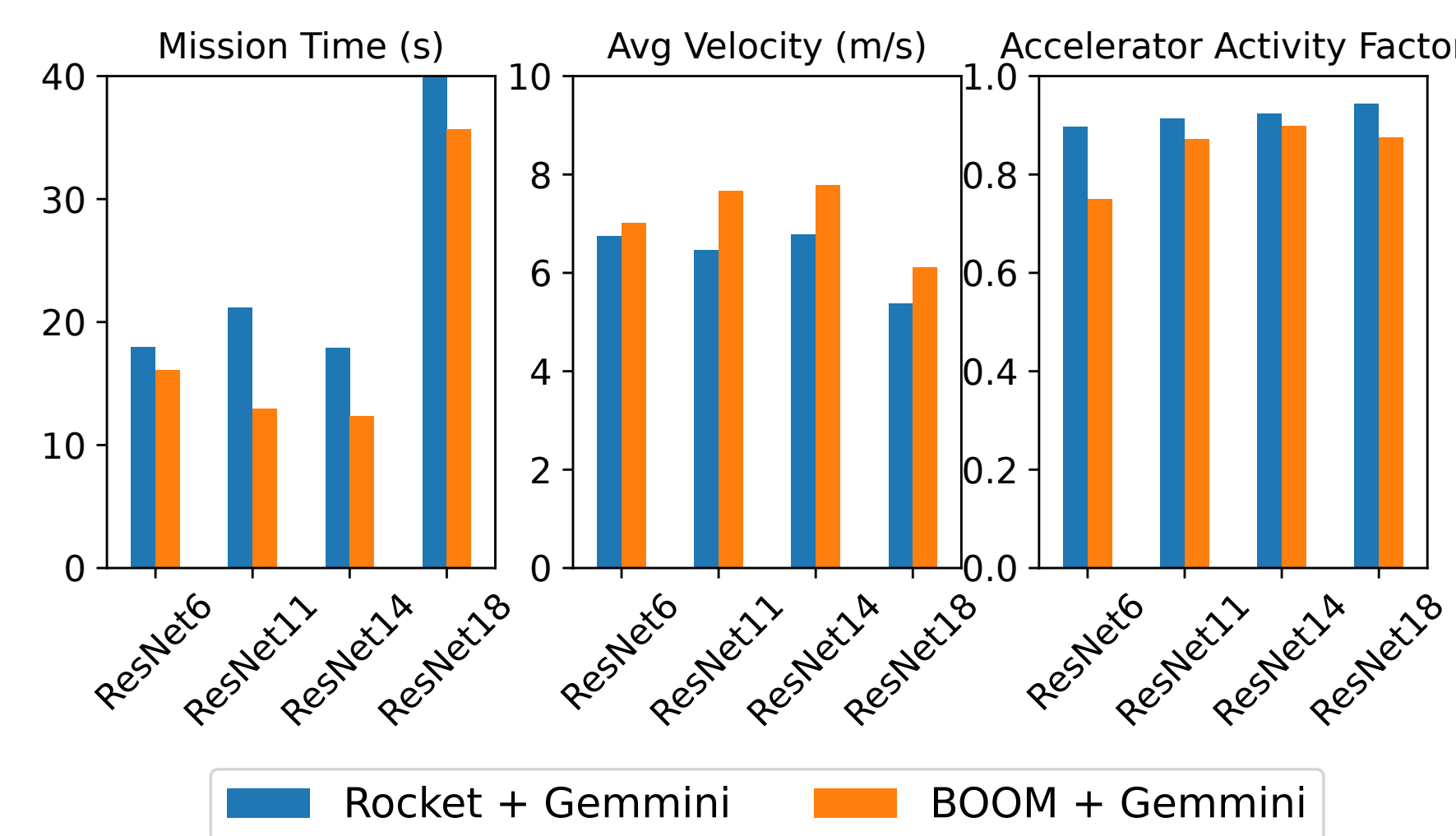


Experimentation

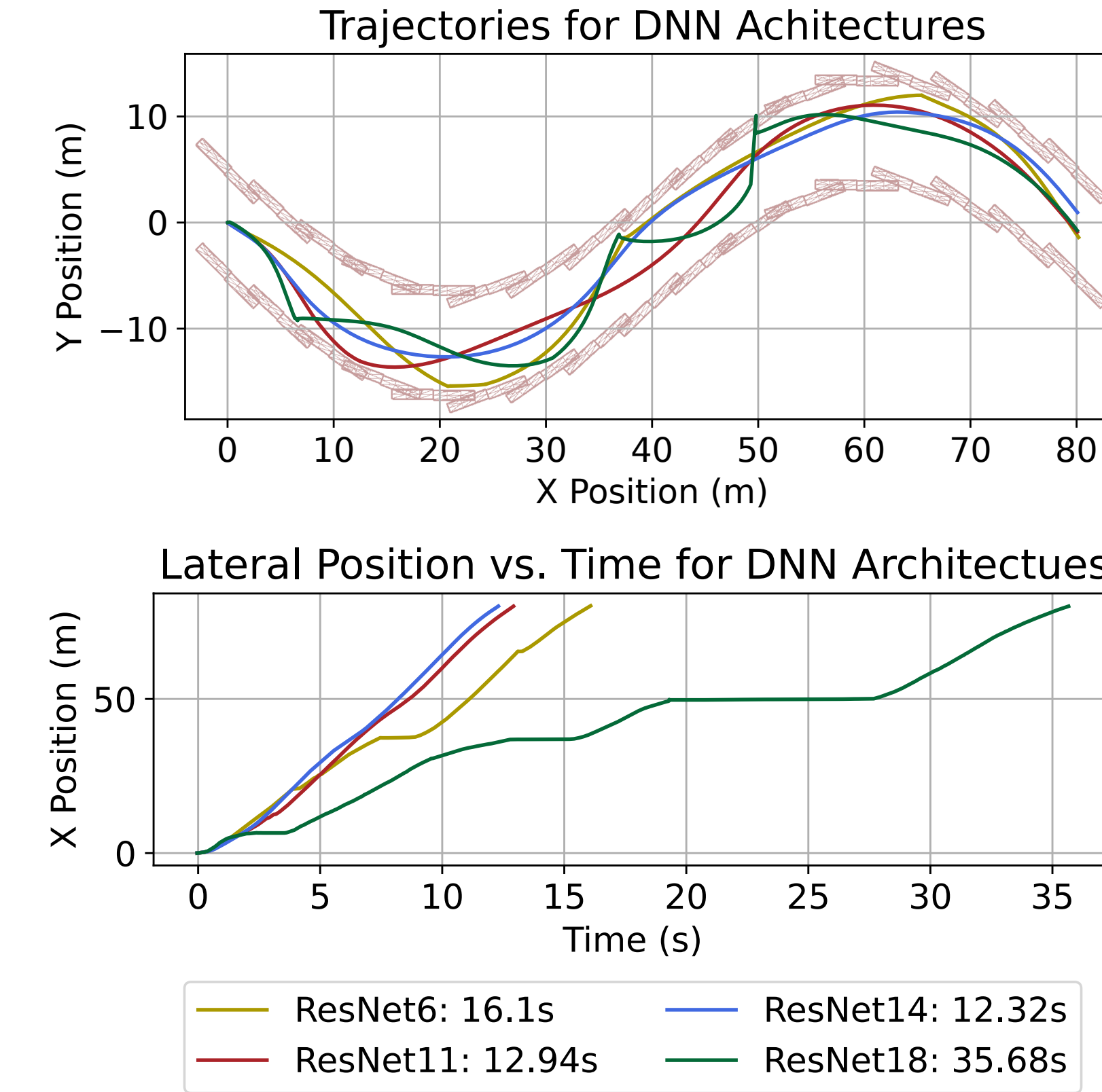
Architectural Sweeps



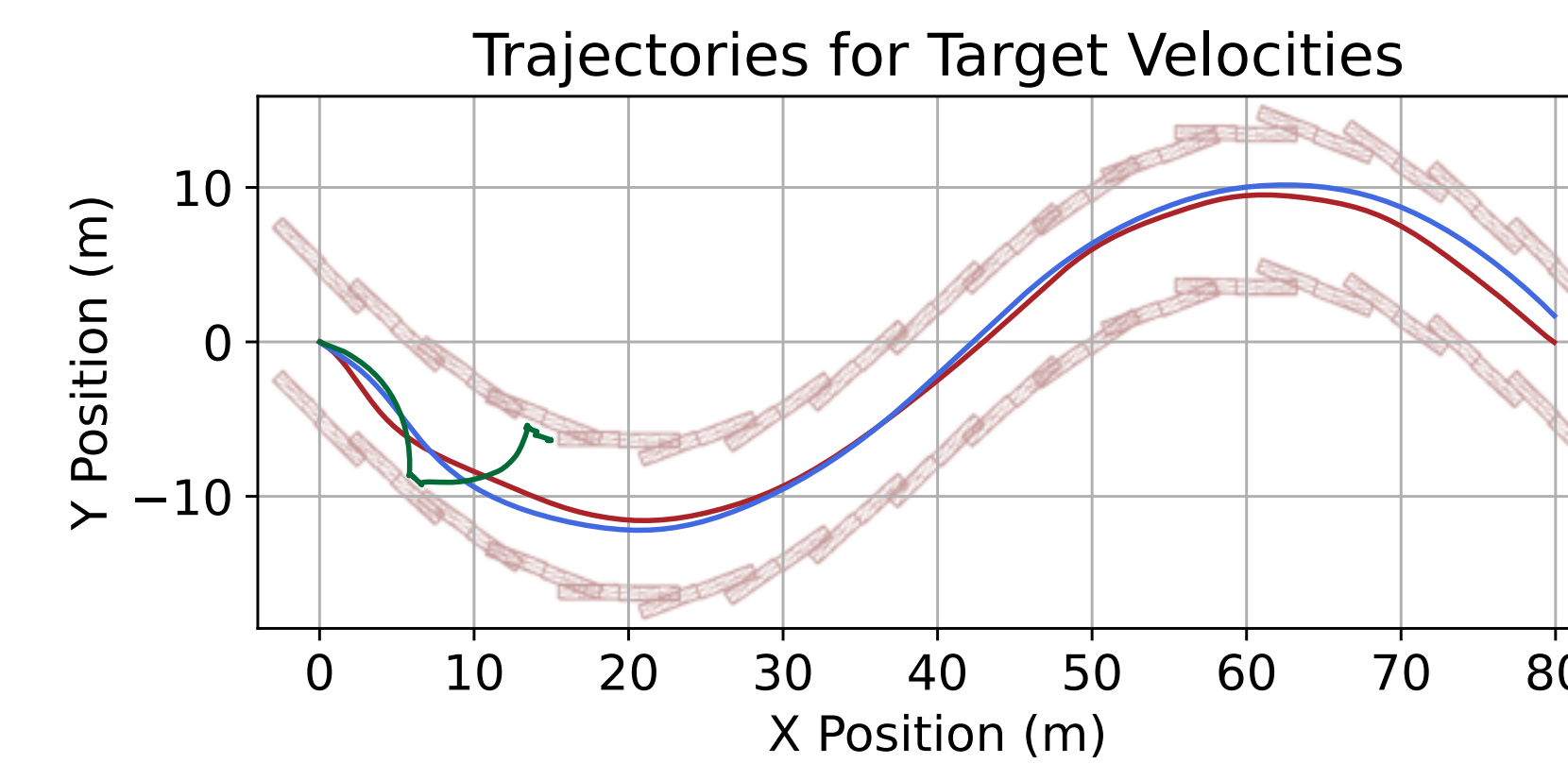
HW/SW Co-Design



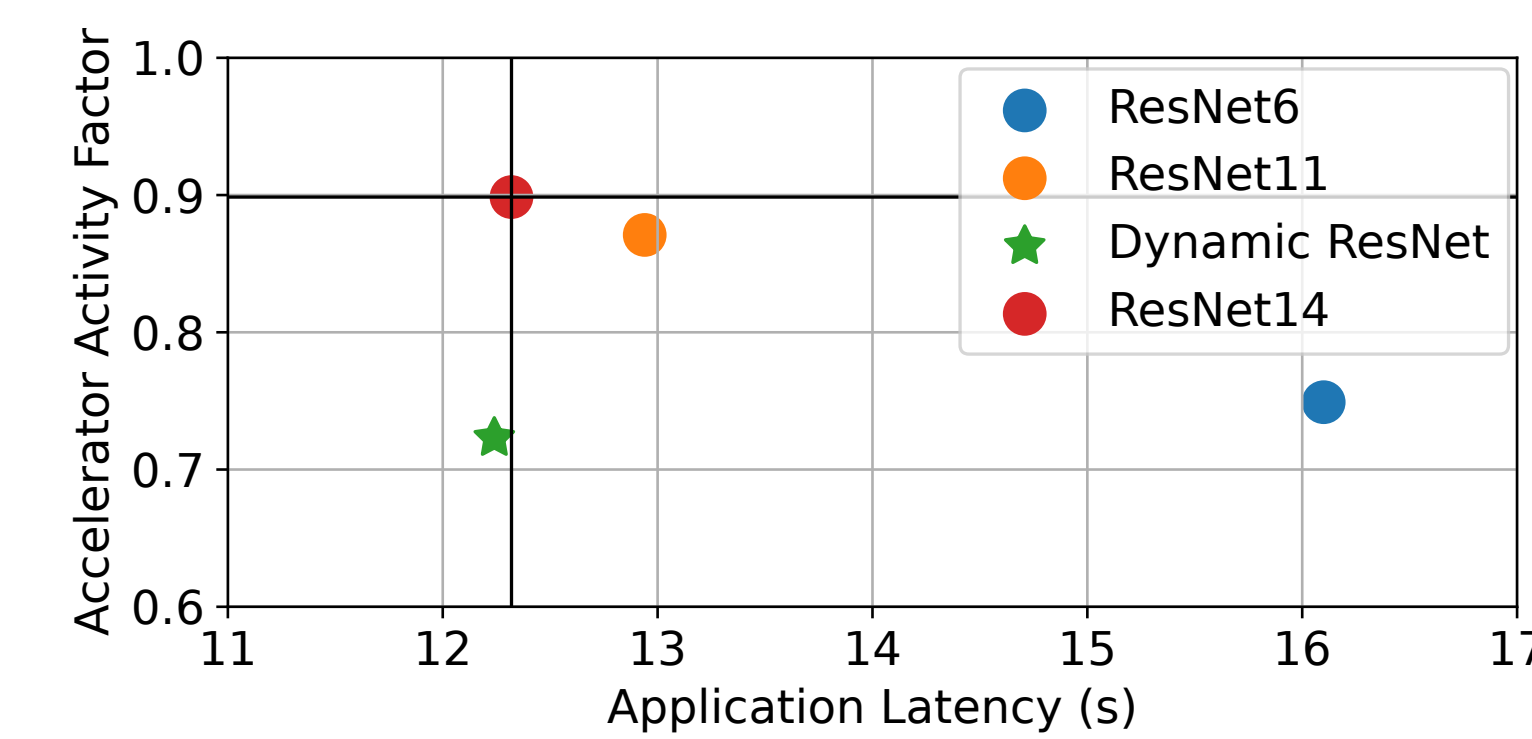
DNN Architecture Sweep



Velocity Sweep



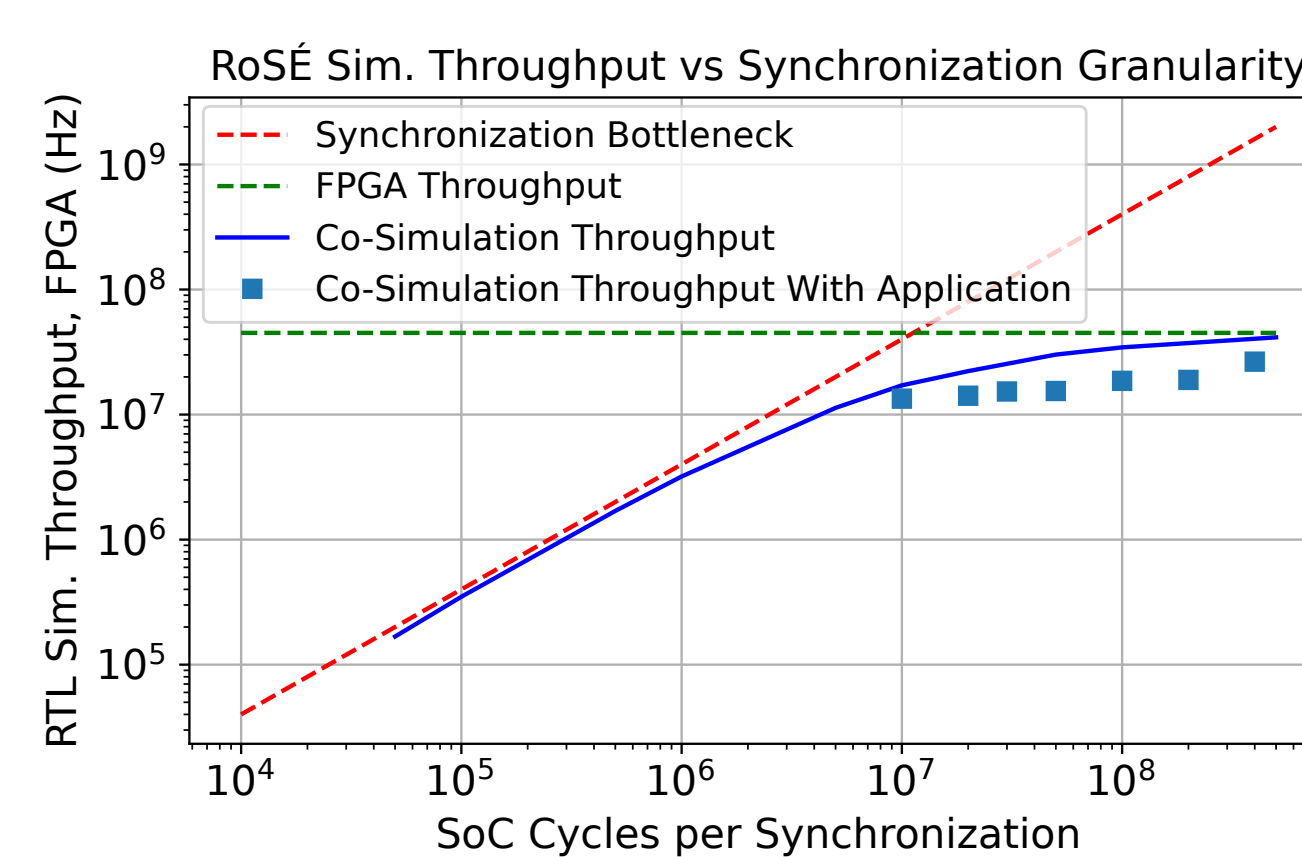
Dynamically Scheduling DNNs



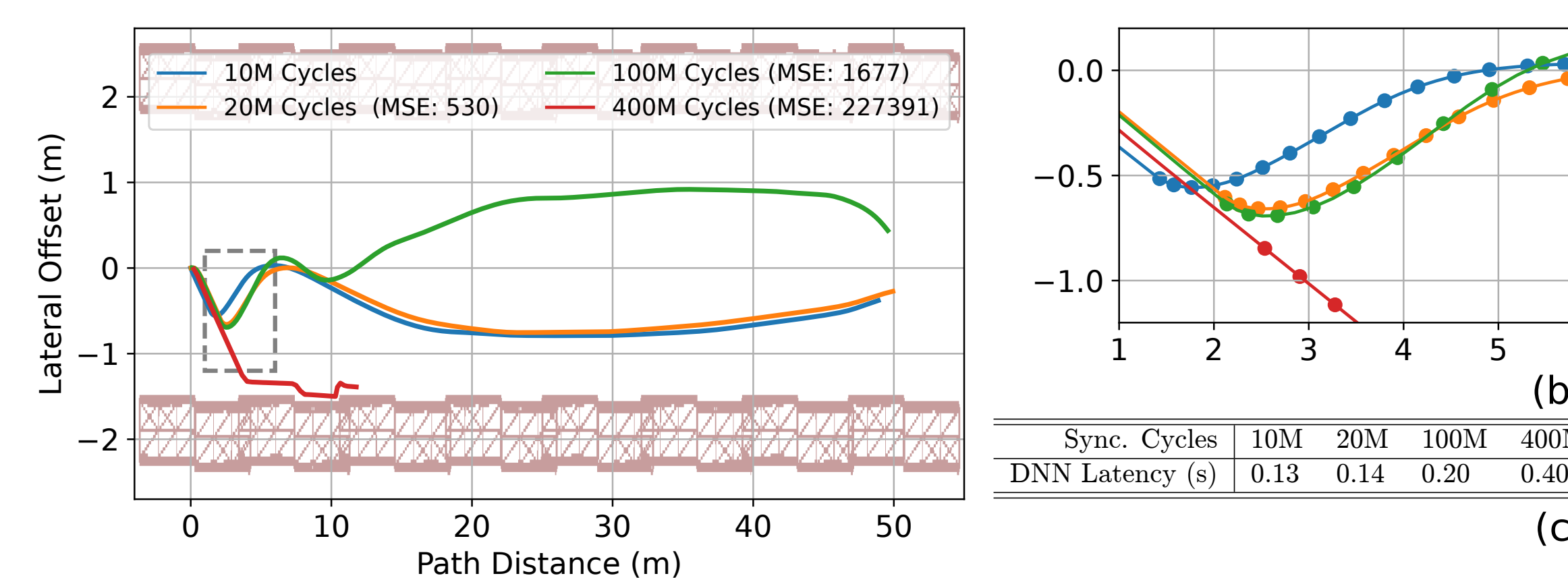
Dynamically select between ResNet14 and ResNet6 depending on depth sensor measurements.

Simulator Parameter Tradeoffs

Performance

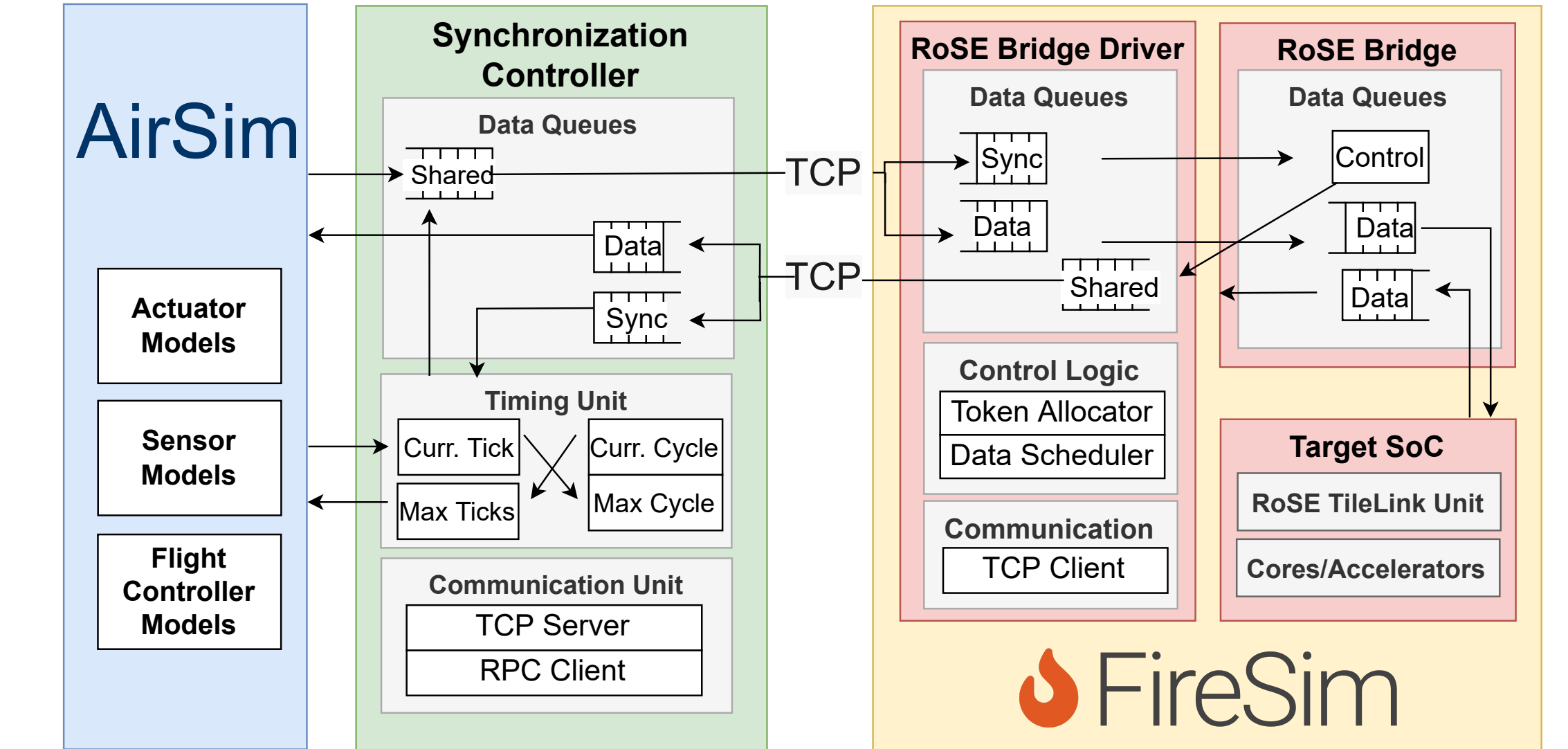


Accuracy

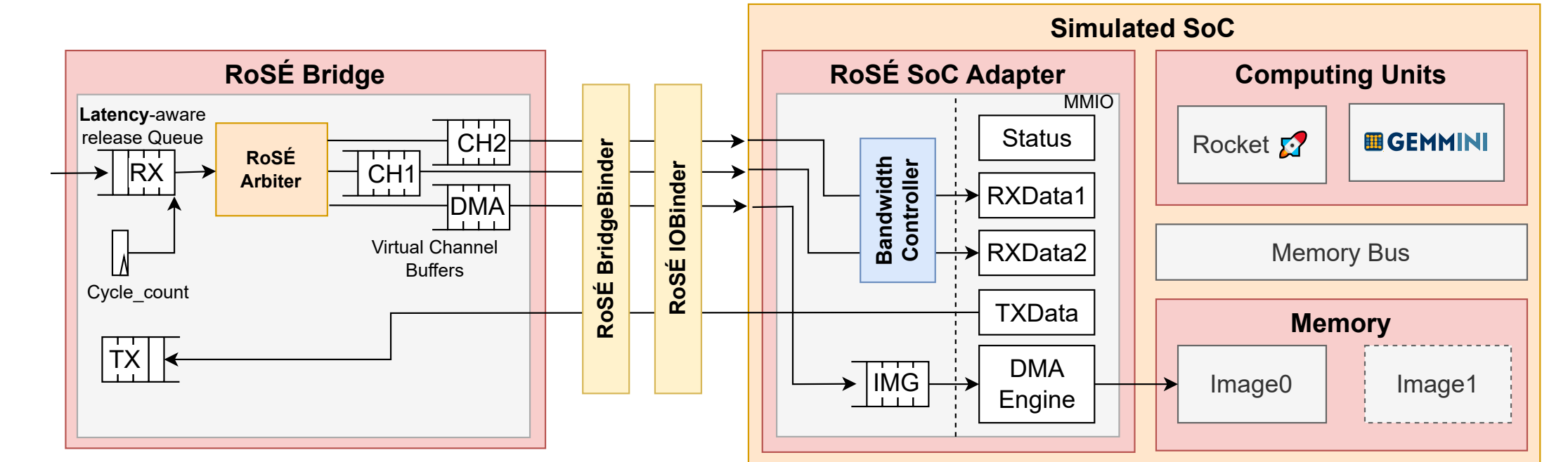


Infrastructure

Architecture

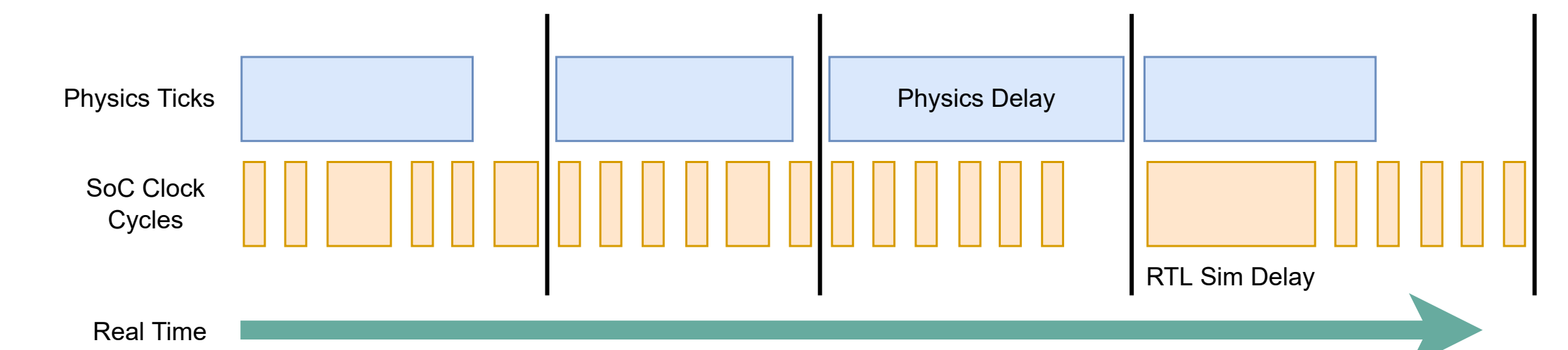


RoSE Adapter



- Step-Latency injection in Synchronizer
- Cycle-Latency injection in Bridge
- Configurable MMIO & DMA Engine type, latency & BW

Synchronization



New Environments



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