



WIRELESS
INSTITUTE
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Panel - Thoughts on IoT: Data, Sensing, LLMs

Aaron Striegel (striegel@nd.edu)

University of Notre Dame



Opportunity: IIoT / Multi-Modal



Over emphasis on smart home IoT,
too convenient?

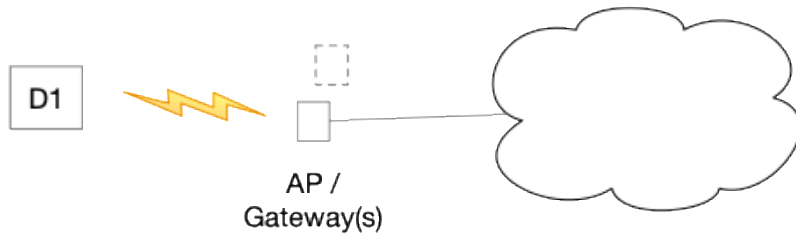


Industrial Internet of Things (IIoT),
Smart Agriculture, etc.



Grab multiple comm channels or at
least more than one

Challenge / Opportunity: Spatial Diversity



Nodes are often viewed as independent w/respect to links

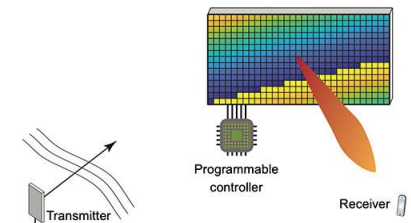
Source \rightarrow sink(s)

Thoughts

Does “late” data have value for learning even if we don’t have it for control?



Can we repurpose / slice comms to sense for monitoring / assistance?



Can we make ultra-low power or even purely passive wireless sensors with **enough** fidelity?

probably

Opinion: LLMs are not the way



True insight or a mirage?

Think the answer is **no** (LLMs)

Energy, cost, ROI issues are
not viable for IoT



Consider

General purpose convenience
vs. novel architectures



Embrace Wild System Designs
Beyond the Edge / Edge ROI
AI / ML for IoT