

## SEMINAR

### *Data-Driven Management for Autonomous Systems*

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**Abstract:** Computer systems are increasingly autonomous; they sense their surroundings, process their operating context and take actions to achieve their goals. Powered by AI, autonomous systems are proliferating in health care, agriculture, sustainability and cloud computing. Examples include autonomous vehicles, automated medical diagnosis and run-scripts for large, complex distributed systems. Autonomous systems simplify programming, reduce costly human labor and improve energy efficiency. However, autonomous systems are inherently closed loop, making their compute needs hard to model. This talk describes the overarching approach taken by ReRout Lab @OSU to manage resources for autonomous systems. We advance the notion of data-driven management that excels when domain-specific training data is married with contextual, first-principles knowledge. We have used this approach to build state of the art self-flying systems and self-managing cloud systems.

Bio: <https://web.cse.ohio-state.edu/~stewart.962/bio.html>

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