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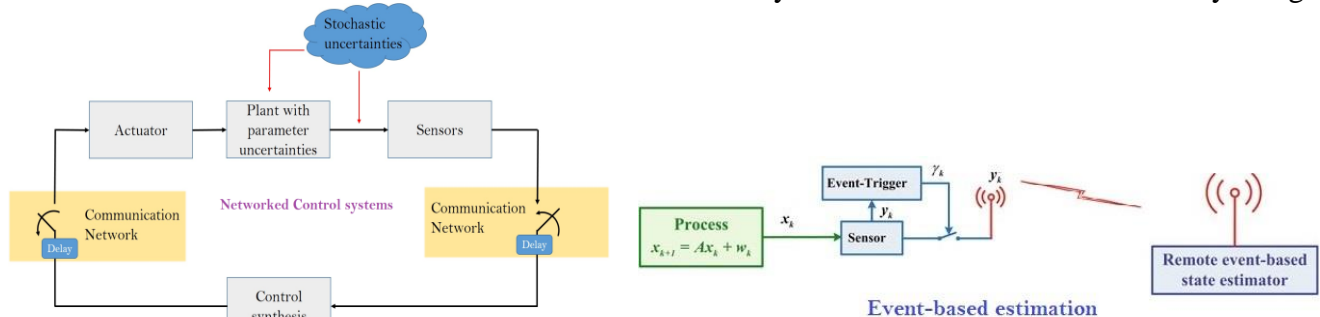


Research Interests

- Stability/control in networked control systems
- Control theoretic approach to cyber physical systems
- Event triggered estimation

Brief Summary of Research

Control systems in general has been an integral part of many areas such as industrial and aerial robotics, automated driving vehicles, and process industries. Traditionally, these systems are locally or remotely controlled using the estimated or obtained state information. The focus of my research is to control these systems under more general conditions such as systems modelled with deterministic or stochastic uncertainties, network of systems communicating among themselves for a coordinated remote controlled task and estimate the state of the systems with reduction in battery usage-



Projects

- "Feedback control of stochastic hybrid systems with state-dependent noise", SERB - Mathematical Research Impact Centric Support (MATRICS) scheme, 2019-2022

Recent Publications

- **S. Chitraganti**, S. and S. Abkerane, "Event based estimation with correlated noises". Journal of the Franklin Institute, accepted, 2019.
- S. Challagundla, **S. Chitraganti**, S. Aberkane, "Event based state estimation under the presence of multiplicative measurement noise", IEEE Control System Letters, accepted, 2019.
- **S. Chitraganti**, S. Aberkane, "Stochastic H-infinity control of state dependent jump linear systems with state dependent noise", IET Control Theory & Applications, v13:9, p.1291-1297, 2019.