CPS: Small: Collaborative Research: Improving Efficiency of Electric Vehicle Fleets: A Data-Driven Control Framework for Heterogeneous Mobile CPS

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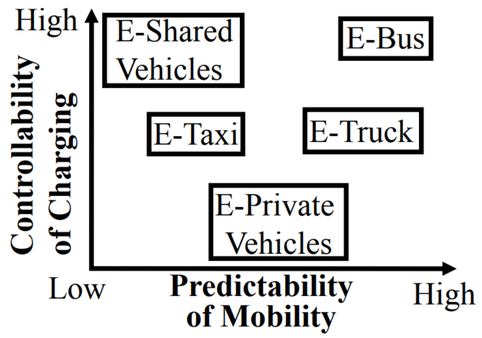
https://www.cs.rutgers.edu/~dz220/NSF1932223.html, http://feimiao.org/research.html

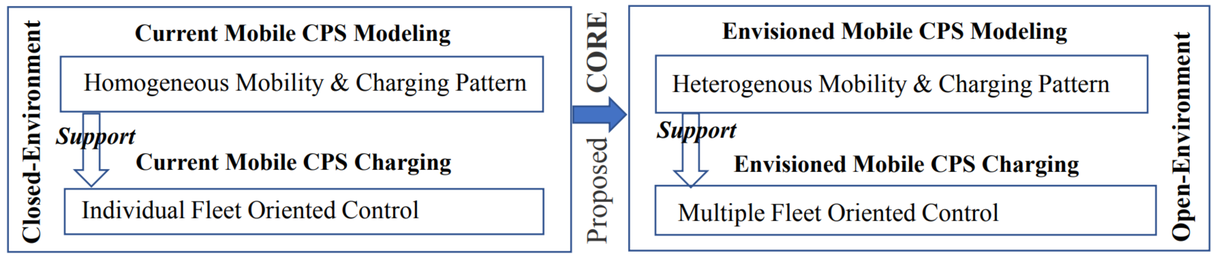
Promotion of Various Electric Vehicles

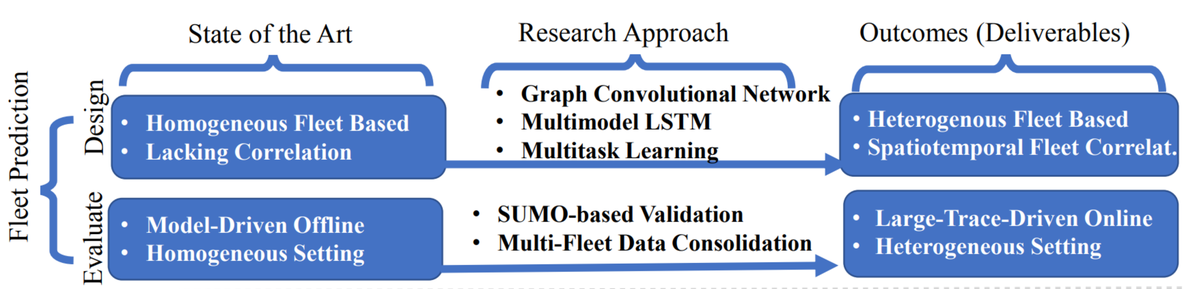
Coordinating Heterogeneous Mobile CPS

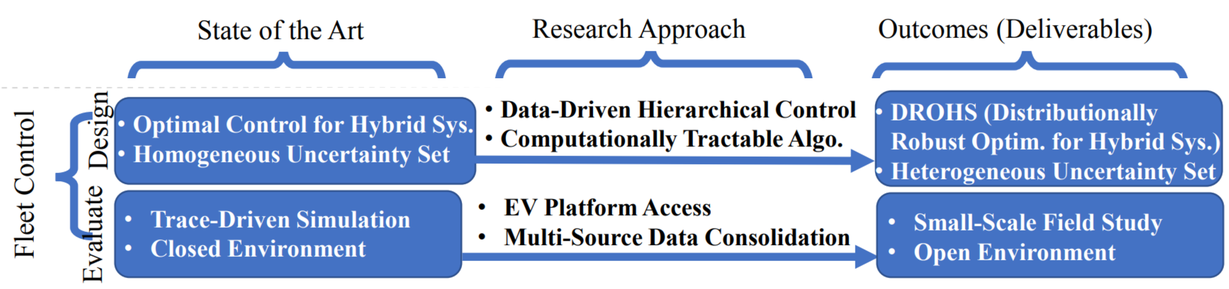
	E-Bus	E-Taxi	Personal EV
Charging Time	4 hours	2 hours	8 hours
Charging Frequency	1-2 per day	3-4 per day	Ad Hoc
Charging Location	Terminals only	Commercial Stations	Home
Charging Strategies	Centralized	Distributed	Distributed



A Generic Framework for CPS Management in Open Environment







- Working with EV Managers of Rutgers EV Fleet
- Releasing EV Management Tutorial
- Collaborating with Escooter Company Veo in NJ for Potential Technology Transfer

- K-12: Two High School Students
- Undergrad: EV Field Study
- Graduate: Courses on Mobile CPS
- Female: Support One Female PHD
- Minority: 2 REU Students

- Releasing 5 GB of EV Data
- Releasing EV Prediction Models
- Organizing EV Workshops
- Publishing 10 Research Papers
- Best Paper Nomination (ICCPS'21)

2021 NSF Cyber-Physical Systems Principal Investigators' Meeting
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