

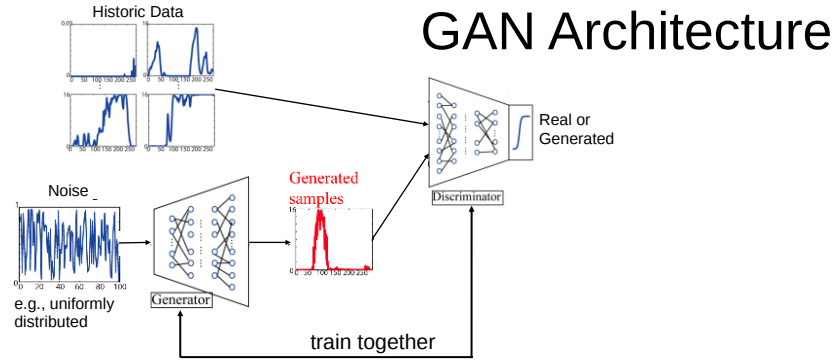
- 2015- Present: ECE at the University of Washington
- PhD from UC Berkeley, Postdoc at Stanford
- <https://zhangbaosen.github.io/>
- <https://scholar.google.com/citations?user=3svZOGAAAAAJ&hl=en>



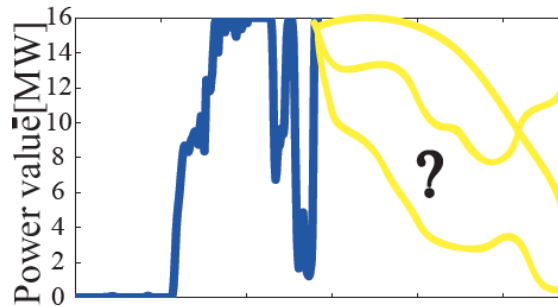
- My group works on various topics in power and energy systems
- Optimization (OPF)
- Forecasting and scenario generation
- Control and learning for nonlinear systems

Scenario Generation

- Largescale generation of solar and wind data



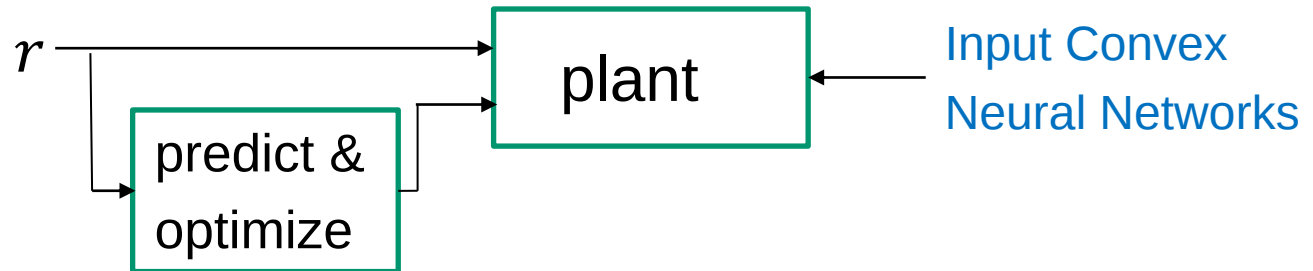
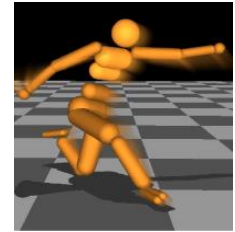
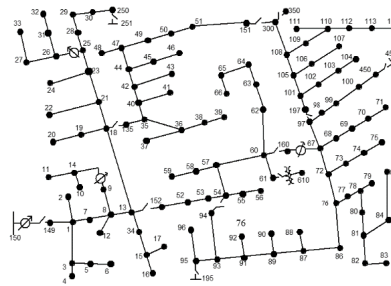
- Conditional Forecasting



- Applied by Seattle City Light in planning

Modeling and Learning

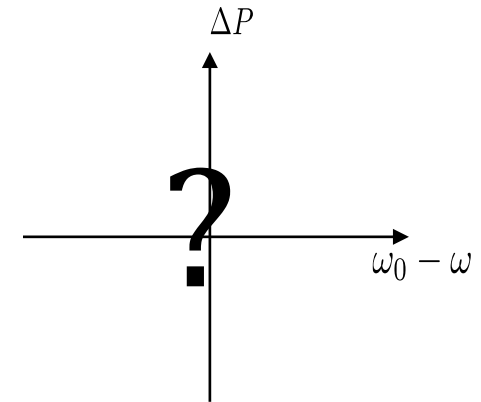
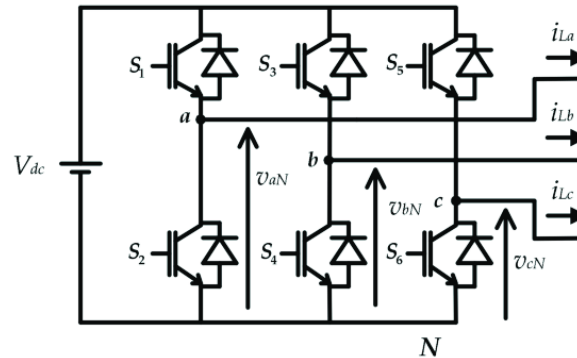
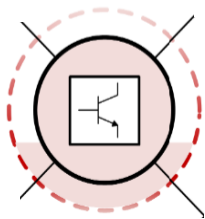
- Lots of physical systems are not linear, but learning them using “standard” DNNs are not suited for control



- Convex control problems, can do theory
- Used on UW campus buildings

Control and Learning

- Designing controllers for inverters



- Finding the right structure on neural networks (monotone)
- Leads to provable guarantees on stability and performance