Jijun's Biases

My education background:

- Undergraduate in Mechanical Engr. (Beijing Univ. of Aero. & Astro.)
- Master degree in Aero. & Astro. (Stanford Univ.)
- One year graduate program in Industrial & System Engr. (UW - Madison)
- Now in ESD PhD program (Research on Enterprise Architecting in LAI)

How do I think about problems?

- Identify the problems want to solve
- Laws of physics, principles from sub-discipline
- Assumptions - engineering is always a way of approximation
- Mathematical abstraction and modeling (analytical or numerical)
- Computer - aided problem solving through iterative ways (simulation)
- Validation: simulation or prototype
- Implementation of designed solutions (not always work)

Jijun's Biases

My research on Enterprise Architecting

- What is enterprise? -- Scope

- "What is" question -- Architecture

- "What might be" and "What should be" -- Architecting

- Focus on "**enterprise modeling and simulation**"

  (why to model, what to model, levels of abstraction)

- Approaches for modeling: Networks, Agent-based modeling, Engineering

   methods,…

- Simulate complex behaviors, such as:

  Emergence, Nonlinear dynamics, self-organization, co-evolution,…

- Validate models: Fidelity of models, simulation vs. empirical case studies

- Fields of knowledge I need to acquire: Network Analysis, Complexity Theory,

  Computational Organization Science,…