

**Aspiring PI Info:**

- Hao Zheng
- Associate Professor
- University of South Florida



UNIVERSITY of  
**SOUTH FLORIDA**

**Research interests:**

- Formal methods and algorithms for scalable verification
- Data mining/machine learning for design automation and verification
- Design with correctness-by-construction

**Current Project(s)**

- Efficient Stochastic Verification of Computation and Communication Systems
- Compositional verification of concurrent system
- Specification mining from SoC communication traces
- RTL code generation using LLMs

**Project Idea(s)...**

- Security of synthetic biology, and its impacts on environment, agriculture, healthy
- Formal methods for security assurance of synthetic biology

**... and possible collaborators sought**

- Researchers in synthetic biology
- Researchers in other fields to discuss their challenges and identify potential collaborations

