

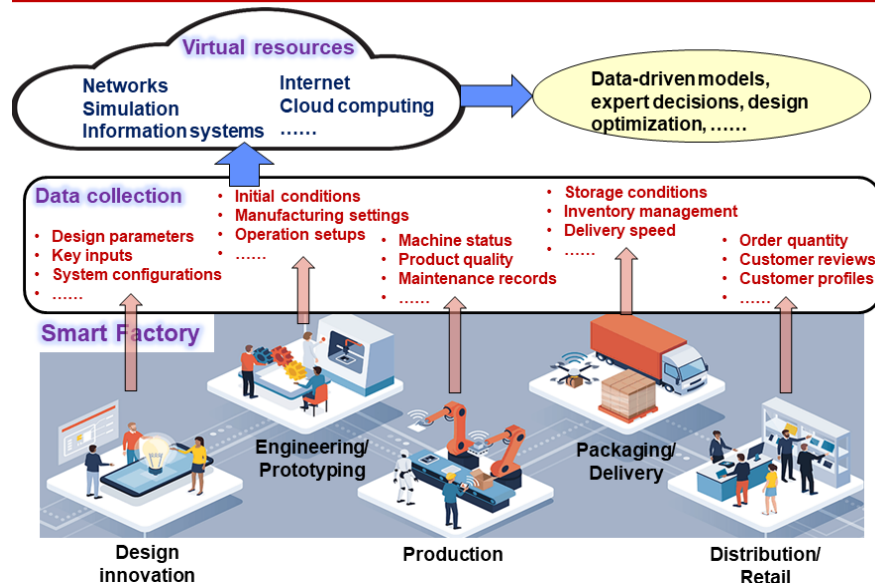
Ph.D. Student Recruitment

My name is Shenghan Guo, an Assistant Professor in The School of Manufacturing Systems and Networks at Arizona State University. I am looking for motivated students to join my group in **Fall 2022** to pursue a **Ph.D. in Systems Engineering**.

The dissertation research will focus on **developing data-driven solutions for smart manufacturing**. Statistical process monitoring, data mining, and machine learning will be intensively used in dissertation research. Specific topics may cover methodology innovation for manufacturing data processing and modeling, data-driven decision-making, interpretable or physics-informed machine learning, diagnostic and prognostics for advanced manufacturing processes (e.g., laser-based additive manufacturing).

You are welcome to apply if you are passionate about data and machine learning and interested in solving real-world decision-making challenges! Qualified candidates will be financially supported with full research assistantship.

Data-Enabled Smart Manufacturing System



Qualification:

1. Meet the admission requirement for the Ph.D. Program: <https://poly.engineering.asu.edu/engineering/phd-systems-engineering/>
2. Solid academic background in statistics, data analysis, and machine learning, e.g., undergraduate/graduate major in these areas, or have learned multiple courses related to the subjects.
3. Proficiency in coding (Python/R/MATLAB/C/C++/Java). Python is highly preferred. Linux experience is a plus.

The Polytechnic School

Sutton Hall, Suite 140 6049 S Backus Mall Mesa, AZ 85212

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4. Preferred major: statistics, applied mathematics, financial mathematics, industrial engineering, computer science, mechanical engineering, electronic engineering, civil engineering. Both graduate and undergraduates are encouraged to apply, but having a graduate degree is a plus.
5. Self-motivation, persistence, curiosity for knowledge, and willingness to learn

About the Program:

The Ph.D. in systems engineering is a transdisciplinary graduate program offered by the Polytechnic School, one of the Fulton Schools. The program is aimed at advancing the understanding of complex engineering systems, where these systems are inclusive of technological aspects as well as social, cultural, environmental, and other interacting components that impact the input, output and interactions within a system.

The program will prepare students to identify, model, analyze, interpret, optimize and manage the multidimensional interactions of the ever-increasing complexity of modern societal and technological challenges. The core provides the foundation for systems thinking, systems identification, systems modeling and systems design and analysis using diverse disciplinary methodological approaches. Students in this doctoral program will use the capacity to evaluate complex systems and a depth of mathematical maturity to study problems for which complexity is impeding progress.

About The Polytechnic Campus:

The ASU Polytechnic campus is a nexus for studies in interdisciplinary sciences, engineering, management, technology and education. Industry partnerships are key to the campus' distinctive course offerings, which provide opportunities for project-based learning within advanced laboratory spaces. Specialized equipment for hands-on exploration includes simulators for flight and centers for consumer behavior research, semiconductor fabrication, comprehensive commercial printing and design services, and on-demand digital manufacturing.

The expansive Polytechnic campus incorporates a major regional airport yet maintains the ambiance of a small, self-contained community by offering family housing, a freshman residence hall, dining facilities and a student recreation center.

A desert arboretum reserves a peaceful native space devoted to sustainability, preservation and contemplation. Within a 30-minute drive of the campus are hiking and recreational opportunities amid the legendary Superstition Mountains, with small and large lakes nearby.

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Websites: <https://isearch.asu.edu/profile/4001269>

<https://scholar.google.com/citations?user=fOwlLIEAAAJ&hl=en>

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