

## Yuyao Wang

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### RESEARCH INTEREST

- Radiation effect modeling and mitigation in VLSI
- Interconnect delay and noise analysis
- FPGA design

### EDUCATION

- Doctor of Engineering, Electrical Engineering, Lamar University, May 2024.
- M.S. of Electrical & Computer Engineering, Southern Illinois University Carbondale (SIUC), 2010
- B.E. of Communications Engineering, Northwestern Polytechnical University (NWPU), 2008

**Teaching Courses:** Electronics, Electronics Lab, Integrated Circuit Design.

**Developed Labs:** Developed lab curriculum for Integrated Circuit Design course lab.

### Work Experience

- **Graduate Research Assistant/Teaching Assistant**  
Electrical and Computer Engineering, Lamar University, Texas(2020.1- 2024.5)
  - As teaching assistant for undergraduate courses Analog/Digital Circuit Design, and Circuits I, my responsibility included assisting in the traditional and open-ended lab design and implementation, as well as grading lab assignment and assisting in hardware design assignments.
  - As research assistant, my responsibilities include radiation induced soft error modeling and mitigation using Spice model, interconnect modeling, low power IC design, FPGA design.
- **Assistant professor**  
Information Engineering Department, Pingdingshan University, China(2016.9-2019.12)
  - Responsible for Integrated Circuit related courses: Digital Circuit Fundamentals; FPGA design; Signals and Systems; Digital Signal Processing; PCB design; Special English in Electrical Engineering etc.
- **Technologist & Project assistant**  
Enrevo Solar LLC, (2013.10-2016.8)
  - Design and testing of IC based devices for PV module.
  - Manufacturing/power generation system monitoring.
  - Assistance in application material etc.

## Selected Publications

1. **Wang, Y.** (2024, January). Low-Power Design of Advanced Image Processing Algorithms under FPGA in Real-Time Applications. In 2024 IEEE 4th International Conference on Power, Electronics and Computer Applications (ICPECA) (pp. 1080-1084). IEEE.
2. Wang, X., Hu, H., **Wang, Y.**, & Wang, Z. (2024). IoT Real-Time Production Monitoring and Automated Process Transformation in Smart Manufacturing. *Journal of Organizational and End User Computing (JOEUC)*, 36(1), 1-25.
3. Sayil, S., Tcheslavski, G., Yoo, J., & **Wang, Y.** (2023, October). Online Electrical Engineering Labs with Collaborative Open-Ended Assignments. In 2023 IEEE Frontiers in Education Conference (FIE) (pp. 1-5). IEEE.
4. Lamichhane, S., **Wang, Y.**, & Sayil, S. (2023). Mitigating soft errors in NCL circuits using a transmission gate. *Analog Integrated Circuits and Signal Processing*, 115(1), 101-109.
5. **Y.Wang.** 5G NR Short Code Encoding and Decoding Algorithm Research and FPGA Implementation, *Informatization Research(China)* 4(2020):10