

## Jeff Dix – University of Arkansas





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## POETS by the numbers:

4 Universities - University of Illinois at Urbana-Champaign (lead), Howard University, Stanford University, University of Arkansas

- 31 Faculty
- 107 Student Researchers
- 38 Ph.D., 29 M.S., 9 B.S. Degrees Granted to date
- 35 Graduates working in industry to date
- 229 POETS publications
- 64 Technical Reports
- 3 Testbeds Aerospace, Off-Highway, On-Highway
- 3 Full patents
- 3M+ in Associated Project Funding (2020-2021)

## **Recent POETS Projects**

High-speed GaN Triple Lateral-JFET Current Limiter

## **POETS & Related Research**

- Analog and Mixed-Signal Integrated Circuit Design
  - Development of Signal Processing Circuitry for Advanced Power Electronics Systems
  - Design and Implementation of Extreme Environment Circuitry for Inclusion in a Variety of Applications
- Gate Driver Integrated Circuit Design
  - Development of Novel Gate Driver Topologies to Improve the Efficiency and Resilience of Power Devices
  - Miniaturization of Gate Driver Topologies to Increase the Power Density of Converters
- Wide-Bandgap Integrated Circuit Development
  - Novel Circuit Development within Immature GaN Technology
  - Model Development of GaN HEMT Devices to Inform the Creation of a Transistor Models for Future Integrated Circuit Development







