Will Meadows

(601)-209-9633 / willmeadows4761@gmail.com
http://willmeds.com

Skills

- Radar and LiDAR signal processing
- Circuit design & circuit board fabrication
- Pspice, OrCAD Layout Plus, Mentor Graphics PADS
- MATLAB and Simulink control system development
- Digital signal processing
- Machine learning and neural networks
- Python, C++ and C programming languages
- Microsoft Windows & Unix-based operating systems
- Automotive, Aerospace wiring and harnessing
- High voltage DC energy systems

Education

Master of Science in Electrical and Computer Engineering
Mississippi State University 4.00/4.00

Bachelor of Science in Electrical Engineering
Mississippi State University
Summa Cum Laude 3.91/4.00
Minor in Mathematics

Experience

Engineering Research and Consulting – Rover Power Systems Engineer (August 2019 – Present)

- Supporting NASA Johnson Space Center under the JETS contract.
- Design engineer for the VIPER Lunar Rover
- Electrical harness design
- BLDC motor controller design and testing

Oak Ridge National Laboratory – Department of Energy SULI Intern (June – August 2018)

- Sustainability analysis of using smart technologies in manufacturing plants
- Evaluating bringing Industry 4.0 technology to existing factories
- Technologies include, internet of things, sensors, and image processing
- Industrial waste recovery analysis
- Investigating recycling industrial wastes from one industry in other industries

Mississippi State University's Center for Advanced Vehicular Systems (August 2015 – August 2019)

Halo Project: Off-road autonomous vehicle, electrical integration lead (2017 – 2019)

- Intrinsic and extrinsic multi-LiDAR calibration
- LiDAR data classification using neural networks
- Converting a production vehicle into a "drive by wire" system (2017)
- Developing safety hardware allowing a driver to override the "drive by wire" system

"Car of the Future" Electrical Lead (2016 – 2017)

- Developing a range extension hybrid vehicle for CAVS internal research
- Designing and constructing an electric powertrain and energy storage system
- Working with a team of undergraduate, graduate, and full-time researchers
- Designing digital and analog circuitry
- Prototyping and fabricating printed circuit boards
- Designing, and fabricating automotive wiring harnesses

Academics and Activities:

Member of IEEE Eta Kappa Nu Honor society (2017 – 2018)
Member of Phi Kappa Phi National Honor Society (2016 – 2018)

- Rank in top 7.5% of the Junior class of all disciplines.

Shackouls Honor College Graduate (2018)

President's list (2014 – 2019)
Society of Automotive Engineers (2016)
Mississippi State University EcoCar 3 Electrical sub-team (2015)
Engineering study abroad in France (2015)
IEEE Professional Society (2014 – 2015)

Publications

Nimbalkar, Sachin U., Supekar, Sarang D., Meadows, Will, Wenning, Thomas, Guo, Wei, and Cresko, Joseph. Enhancing Operational Performance and Productivity Benefits by Implementing Smart Manufacturing Technologies in Breweries. United States: N. p., 2019. Web.

W. Meadows, C. Hudson, C. Goodin, L. Dabbiru, B. Powell, M. Doude, D. Carruth, M. Islam, and B. Tang, "Multi-LiDAR placement, calibration, co-registration, and processing on a Subaru Forester for off-road autonomous vehicles operations," Proc. SPIE 11009, Autonomous Systems: Sensors, Processing, and Security for Vehicles and Infrastructure , May 2019.

Sockeel N, Shahverdi M, Mazzola M, Meadows W. High-Fidelity Battery Model for Model Predictive Control Implemented into a Plug-In Hybrid Electric Vehicle. *Batteries*. 2017; 3(2):13. https://doi.org/10.3390/batteries3020013