

Michael Lane Simmons

Starkville, MS 39759
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Professional Career Summary

Over 6 years of process experience in semiconductor fabrication; specializing in diffusion, metrology, and wet clean / strip operations

4+ years of experience in the manufacturing industry managing electrical projects, designing control systems for new projects, optimizing existing control architecture, and building drop-in control upgrades for obsolete systems.

Founder of a startup company in the automotive sector with a focus on developing new products for 90s era Japanese sports cars.

Experience

2012–Present Southwire Company Starkville, MS

Electrical Engineer

- Responsible for equipment purchases along with the respective electrical installation, commission, training, and sustainment.
- Regularly design, document, and install new control system upgrades and full control replacements for aging or obsolete manufacturing lines.
- Manage an 8 man team of electrical contractors and support the plant's electrical maintenance group by generating work plans, drawing schematics, purchasing parts, and providing a safety net for escalating problems.

2006–Present Halfspec Engineering Starkville, MS

Founder

- Developed microprocessor based electronics for automotive applications involving waveform conversion, frequency adjustment, electromechanical control, and DC motor control.
- Created plug-and-play air conditioning kits for third generation Mazda RX7's with GM V8 engine swaps utilizing a developed standalone electronic control system, and a tailored hose kit.
- Successfully drafted, 3D print prototyped, and mass manufactured a finalized version of a motorized antenna to stubby antenna adapter in machined aluminum.
- Authored all supporting documentation, manuals, and installation tutorials for every product offering.

2009–2012 Semisouth Laboratories, Inc. Starkville, MS

Process Engineer

- Created six sigma process control strategies to increase product yield and discover process related problems.
- Developed and implemented a new wafer cleaning processes that reduced chemical consumption by 85%.
- Transitioned manual metrology processes for every product line to a fully automated process resulting in 75% time savings at each measurement step.

2006–2009 Semisouth Laboratories, Inc. Starkville, MS

Cooperative Education Student

- Managed electrical characteristic testing on devices in process.
- Authored operator work instructions for many of the steps in the manufacturing process.
- Assisted senior engineers with capturing sample data and compiling datasets.

Education

2005–2009 Mississippi State University Starkville, MS

- Bachelor of Science, Electrical Engineering / Mathematics

2003–2005 Meridian Community College Meridian, MS

- Engineering Major

Related Skills

2D/3D/Schematic Drafting, Ladder Logic Debugging / Programming, PCB Schematic/Layout/ Footprint Creation, AC/DC Motor Drive Programming / Integration, Power Distribution Design, Turbo-Encabulator Modeling.

Rockwell Control & HMI Software, Cmore HMI, OrCAD Pspice, Eagle, OpenSCAD, AutoCAD, Sketchup, Minitab, JMP, Matlab, Atmel and WinAVR toolchains, Visual Basic, Microsoft.NET, Windows 3.11 – 10, DOS 6/7, Linux, MS Office.

Activities/Honors

- Tau Beta Pi
- Phi Kappa Phi
- Phi Theta Kappa
- National Deans List

Links

www.halfspec.com

www.linkedin.com/in/lane-simmons

References

Available on request