Ray Schuler - Electrical, Software, and Mechanical Engineer

CONTACT

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Voice: (802) 310-2905

ENGINEERING

Analog Circuit Design
Board and Chip Level Design, CMOS/BiCMOS/GaN, Tranceivers, Switch Mode Power Supplies, Charge Pumps, High Voltage Drivers, Analog to Digital Conversion, Precision References

Software Development
Hardware Control, Embedded Systems, DSP, Simulation, Product Characterization, Statistical Inference, Library and API development

Analog/Digital Systems Design
Hot Word Detector, Ultrasonic TOF Ranging, Low Noise RF Gate Control, Parametric Measurement, Thermal Management, MFG Tool Automation, Optical Characterization

Mechanical Design
Robotic Lawn Mower Chasis, Laser Alignment Fixture, Product Prototyping, 3D Modeling, Additive Manufacturing Techniques

COMP SCI

Languages
C, C++, Go, Python, R, Matlab, Bash, Lisp

Systems Deployment and Admin
Unix/Linux (Redhat/Centos, Debian/Mint, OSX, Alpine), Windows, Cadence Design Suite

Engineering Tools
Git, GCC, Unix ABI, Cadence Spectre/Virtuoso, LTSpice, Freecad, LaTeX

PROJECTS

Personal
Voice Controlled Lamp (Golang, Pico) Link
Ultrasonic Rangefinder (C/C++, Pico) Link

IBM/Globalfoundries 2008 - 2021
Senior Analog Circuit Designer, Software Team Lead,
Product Development and Characterization, Software Development in C/C++, Python, Lisp,
Semiconductor Modeling, Customer Reference Designs,
Development and Implemented of STDF Compliant API,
RF Tranceiver Antenna Switch Controller Link

Linear Technology 2002 - 2008
Senior Analog Circuit Designer, Interface Products, Field Fail Analysis Correction,
Designed First Commercial RS485 Transceiver with Integrated Termination Link

Champlain College 2012 - 2014
Adjunct Professor, Unix Systems Programming, Collaborative FOSS Software,
STEM Tutoring

EDUCATION

Michigan Technological University, Houghton, MI USA
BSEE Microelectronics and Control Systems

National Technological University, USA
VLSI Design (UMN), Analog Circuits (MIT), Computer Graphics (UMASS),
Complex Variables (Vassar), Semiconductor Device Physics (Syracuse)

Thank you for your time. References available upon request