

Resume

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EDUCATION BACKGROUND

PhD with GPA 3.92, NC State University, USA (2016.1~current)
MSEE with GPA 3.97, NC State University, USA (2014.8~2015.12)
BSEE with Outstanding Thesis, Lanzhou University, China (2010.9~2014.5)

SPECIALTIES

Power converters design	I designed a couple of power converters
Precise analog design	I began designing amplifiers since I was eight
Complicated PCB layout	I do fine pitch BGA/QFN layout with SI/PI considerations
C/C++/VB programming	I started coding since the age of Windows 98

GRADUATE COURSEWORKS

Power Electronics	Power System Operation and Control
Business of the Electric Utility	Communication and SCADA Systems
Computational Methods	Renewable Energy Resources
Smart Distribution Systems	Project Management and Presentation
MS-EPSE Practicum Project	Energy Storage Devices
Semiconductor Power Devices	Power Electronics Packaging
Analog Integrated Circuit Design	Power Management IC

UNDERGRAD COURSEWORKS

Analog Circuitry	Graduated with outstanding thesis
Computer Architecture	Communication Theory
Digital Circuitry	Digital Signal Processing
Classic/Digital Control Theory	Programmable Logic
C Programming Language	Signal and System
Microwave Engineering	Embedded System
	Calculus/Linear Algebra

PROJECTS (I am a hobbyist for 14+ years, this list lists only projects done from college)

Optical Gate Driver for Extreme High Voltage (personal project, currently active)
Multiphysics Simulation Engine for Power Module (with PREES, currently active)
6.5kV Super Cascade Power Module (with Power America, currently active)
Ultra High Density Power Converter Module with FPCB (with PRESS, currently active)
Transient Load Response Optimization of Natural Gas Micro Turbine (with FlexGen, done)
Ultra High Dynamic Range Sigma Delta DAC (personal project, abandoned)
Gallium Nitride High Voltage High Frequency Power Module (with FREEDM, done)
High Precision Audio AD/DA System (China national pilot project 2012, done)
Wireless Natural Disaster Sensor Core Module (school project, done)
Smart Robots with Advanced Communication and Computer Vision (Intel contest, done)
Dam Monitoring System (China national pilot project 2010, done)
USB Mini Lab Power Supply (personal project, partially done, abandoned)
High Power Class-E Radio Power Generator (personal project, partially done, abandoned)

AWARDS

2014 Intel Cup Embedded System Design Contest, 3rd Prize (robotics and computer vision)

2014 Lanzhou University Outstanding Undergraduate Thesis (robotics and communication)

ACTIVITIES

2014-Current, Christians on Campus, NC State University

2010-2014, Open Source Society, Lanzhou University (Man in Charge from 2011-2012)

2010-2012, Software Freedom Day, Lanzhou University

PUBLICATIONS

Increasing Electrical and Thermal Performances of VRMs by Using Folded Flexible Construction (to be published on Transaction of Industrial Electronics Wide Band Gap Special Issue 2016)

A Folded GaN VRM with High Electrical and Thermal Performance (published on 3D-PEIM 2016)

An NP Architecture with Cell-Grid Based Data Path (published on IETFC 2012)

The Combination of Cloud Computing and Internet of Things: An Intelligent Motor Vehicle Management System (published on IETFC 2012)

Hobbies and Other Capabilities

I am an experienced audiophile and I've been building amplifiers and DACs for over a decade.

I am a veteran coder in common algorithms, embedded, and user interface.

I am a computerphile and I started building gaming rigs for 13 years.

I have basic proficiency in inorganic chemistry and organic chemistry.

I speak English, Chinese and Japanese. I translate English/Japanese videos to Chinese.

I am an active member and supporter of one of the most popular electronics forums, EEVblog.

I am a Linux power user and I write Kernel modules and compilers.

I am a hoarder of test equipment, and I have my own home lab that does EMI, PI, SI measurements up to 4.4GHz and oscillography measurements up to 6GHz.

I have a broad range of software asset ranging from commercial license of Altium Designer and MS Office, a number of filter designing tools and a number of home brew simulation ranging from circuit simulation to Multiphysics simulation, and 3D modeling tools.