Andy Yang

Contact Information

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Education

University of Florida, Gainesville, FL

B.S., Electrical Engineering, 3.9 GPA **Dec 2020**

Professional Experience

Texas Instruments, Dallas, TX

Power Design Services Intern **May 2019 – Aug 2019**

- Designed an embedded transformer in a 10 layer PCB for use in a Half Bridge Rectifier with Current Doubler Output. Specs: V_{in}= 24V–32V, V_{out}= $0.5V$–$1V$, $I_{out} = 40A$. PMP22089.
- Designed an inverting buck boost converter – schematics to PCB.
- Designed schematic for a low power DCM Flyback Converter.
- Worked on over 13 Design Requests (block diagrams, test reports, parts selection etc).

GE Appliances, Louisville, KY

User Interface / Electronics Intern **Jan 2019 – May 2019**

- Increased engineering capabilities by fixing and implementing a photometer to objectively measure light and displays. Created documentation to allow for use by teams across the campus.
- Supported team by debugging hardware and software issues. Accelerated product release dates.

Next Era Energy, Juno Beach, FL

Distributive Generation Intern **Mar 2017 – Aug 2017**

- Designed preliminary solar array layouts for ground-mount, roof top, and carport systems.
- Analyzed field results of inverters and helped solidify inverter purchase decisions.

Involvement & Projects

University of Florida, Gainesville, FL

Teaching Assistant **Aug 2019 – Present**

- *Design 1*: Guided students as they learn how to debug and how to build simple AC/DC rectification circuits, amplifiers, and rudimentary active/passive filtering circuits. Students also learned PCB Design, embedded programming, communications protocols, etc.
- *Power Electronics*: Taught students to use electronics loads, power supplies, current sensor, and oscilloscopes to measure and test switching converters. Reinforced theory learned in class.

PEEPRL Lab, Dr. Shuo Wang's Research Group

Undergrad Project **Aug 2019 – Present**

- Researched advanced MPPT technologies (Differential Power Processing).
- Designing DPP based solar harvesting system for use in a solar car.

Solar Gators, Solar Car Design Team

MPPT Lead **Aug 2018 – Dec 2018**

- Designed a Maximum Power Point Tracker, implemented with a 2 phase Boost Converter
- Implemented design and P&O algorithm on a custom PCB and embedded processor

Electrical Lead **Aug 2017 – Aug 2018**

- Managed electrical design team of 20 persons. Integrated electrical subsystems.
- Managed project timeline, and gave direction for electrical systems designs.

Ebike Project, Freshman Project **Aug 2016 – Jan 2017**

- Learned to engineer on a systems level by integrating different off the shelf components
- Created 13s11p Battery Pack from 143 used 18650 Li-Ion cells with a homemade spot welder.

Relevant Coursework & Skills

Courses: Power Electronics 1 & 2, Magnetics, Programming Fundamentals 1 & 2, Microprocessors, Analog Electronics, Linear Controls

Skills: Altium Designer, MATLAB, LTSpice, SIMPLIS, C, C++, Python,