

KYLE PLATT

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OBJECTIVE | An Electrical Engineering Internship that incorporates Mechanical Engineering.

EDUCATION | **BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING**, MAY 2018
NORTHERN ILLINOIS UNIVERSITY, DEKALB IL
3.494/4.0 GPA
Activities: NIU IEEE Student Branch | NIU Robotics | NIU Triathlon Team

SKILLS & ABILITIES | AVR, ARM and PIC programing • μ C Utilization • Circuit design • PCB layout • DRC • Rapid Prototyping • DC-DC Power System Design • Feedback and Control Systems • SPI • I²C • CAN-BUS • Serial • BOM creation • Part selection and sourcing • Cleanroom procedures • System Troubleshooting • Circuit Analysis • Hybrid circuit design

Interpreting Technical concepts • Strong team player • Explaining Technical ideas • Logical problem analysis • Grasp new ideas and implement to meet goals • Work well independently • Evaluating options and generating solutions • Team leader, team player and instructor • Self-motivated

EQUIPMENT | Oscilloscope • Logic Analyzer • Network Analyzer • DMM • Function Generator • Power supplies • Soldering • PCB Populating • SMT Reflow • Hot-air Rework

SOFTWARE | SolidWorks 2015 • Creo 3 • Altium 15 • OrCad 16 • KiCad • MS Office 2013 including Visio and Access • Visual Studios • QT Creator • Adobe CS6 • C++ • Python

PROJECTS | **ROBOTIC CONTROL BOARD** NIU ROBOTICS
Designed circuit integrating an ARM μ C to interface • Controls multiple 24V Pneumatic proportional solenoids, Motor Controllers, I2C devices • Wireless digital communications, CAN-BUS, and analog sensors. PCB designed utilizing surface mount devices adhering to DRC • Populated, reflowed and reworked utilizing NIU's cleanroom

SYSTEM ISOLATION BOARD NIU ROBOTICS
Designed and produced solution to prevent catastrophic system failures on a RC Quad-Rotor by external systems

INTERNET CONNECTED HVAC CONTROLLER INDEPENDENT PROJECT
Designed HVAC controller system around an ARM computer • Interface with HVAC through a web interface running on the ARM computer

LED 360° DISPLAY INDEPENDENT PROJECT
Designed 360° display with 480 individually controlled RGB LEDs mounted around a hat • Controlled by an Atmel μ C and BT module • Utilizes a lithium polymer battery and switching power supply • Efficient performance • minimal weight

UAV GEO MAPPING COLLABORATIVE PROJECT IN YUCATAN
Worked with NIU Dr. Of Geology and NIU Emeritus Professor in the Yucatan on a UAV used to gather data to create a 3d topographic map. Provided training and technical support of the hardware and software systems. Created SOP and documentation for safe operation.

LEADERSHIP | NIU IEEE Student Branch Secretary | NIU Triathlon Team Secretary