

# THOMAS A. KILBRIDE

## PRESENT ADDRESS

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West Lafayette, IN 47906  
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## PERMANENT ADDRESS

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## EDUCATION

Purdue University, West Lafayette, IN  
Bachelor of Science, Electrical Engineering, Fall 2015 (expected)  
Bachelor of Science, Economics, Fall 2015 (expected)

## EXPERIENCE

**Electronics Design Engineer**      FirePICK      May 2014 - Present  
<http://delta.firepick.org/>  
Designed circuits and motor control algorithms for use in a pick-and-place machine. Assisted with delta mechanism and motor controller circuit board design. The project is currently ranked 1<sup>st</sup> for the HackADay prize.

**Freelance Design Engineer**      Self-Employed      Fall 2007 - Present  
(portfolio available upon request)  
Developed embedded devices and wrote software for many different applications. Specialized in VoIP, digital wireless communications systems and Data Acquisition (DAQ).

**Electronics Team Leader**      Purdue Electric Racing      Spring 2010 - 2014  
<http://purdueelectric.org/>  
Project manager for electric and combustion vehicle systems. Developed systems to characterize and validate vehicle performance. The data was used extensively to improve performance and competition ranking. Electrical team member in Formula SAE (FSAE) competition.

**FIRST Robotics Mentor**      Purdue FIRST Programs      Fall 2010 - 2011  
<http://purduefirst.org/>  
Assisted high school students with electronics and software design to compete in the national FRC Championship.

## SKILLS

Extensive knowledge of PCB and embedded systems development  
Circuit debugging skills with Logic Analyzers, Vector Network Analyzers, and Spectrum Analyzers  
Programming skills in C, Python, Java, MATLAB, Verilog, ABEL-HDL, and AVR-Assembly  
Experience in SMT soldering, PCB Routing, CNC, manual machining, and rapid prototyping  
Proficient CAD experience in OrCAD, Altium Designer, EagleCAD, KiCAD, and SolidWorks  
Automotive-specific experience in CAN-Bus, dSPACE and wiring loom design

## HONORS AND AWARDS

Won “Most Technically Impressive” and “Most Likely to Succeed Startup” at MHacks Hackathon  
Selected to interview for the YCombinator S14 batch in Palo Alto, CA  
Won 1<sup>st</sup> in “Best Project Concept” in The HackADay Prize competition

## EXTRACURRICULAR ACTIVITIES

Purdue Electric Racing Project Manager and Co-Founder  
Purdue Formula SAE Electronics Team Member  
FirePICK Co-Founder

## PERSONAL INFORMATION

I enjoy playing the viola, video games, swimming, reverse engineering firmware, and Vim.