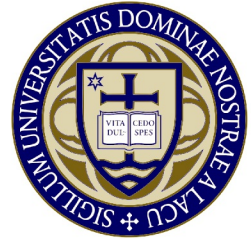


Shane Ryan

www.ShaneRyan.me



EDUCATION

University of Notre Dame

Notre Dame, IN — 2014 - Present

Bachelor of Science in **Electrical Engineering**, expected May 2018

Concentration in Semiconductors and Nanotechnology

Bachelor of Science in **Physics**, expected May 2018

GPA: 3.42 | Engineering Scholars Program | Trustey S.T.E.M. Merit Scholar

Prospect High School

Mount Prospect, IL - 2010 - 2014

High School Ranked 9th in all of Illinois

GPA: 4.0 | Dean's List 8/8 Semesters | Valedictorian | Varsity Football Quarterback

SKILLS

- **Software:** Solidworks, EAGLE PCB Design, SMD and Through-Hole Soldering, Arch Linux and UNIX Terminal
- **Programming:** C, C++, Assembly for PIC24XXX, Matlab, PHP, Typing Speed 76 WPM
 - Designed internet connected "Smart" Keurig, implemented custom SnapChat service using PHP, and created an embedded system to intelligently control room lighting -- all pushed to GitHub

EXPERIENCE

Research Intern, Notre Dame Nuclear Physics Lab

Notre Dame, IN — May 2015 - December 2015

Research Intern, Notre Dame Optoelectronics Lab

Notre Dame, IN — February 2016 - Present

Accomplishments

- Designed, built, and maintained high-voltage electronics systems
- Processed and analyzed data for publication, worked in high-risk environment
- Repaired Class III water-cooled laser and characterized modes
- Co-authored two scientific publications:
 - *A Multi-Reflection Time-of-Flight Mass Spectrograph for Isobaric Purification at the University of Notre Dame*, submitted for publication to the Nuclear Physics Journal NIMB in September 2015
 - *Simulations of the multi-reflection time-of-flight mass spectrograph system at the University of Notre Dame*, submitted for publication to the Nuclear Physics Journal NIMB in August 2015

ACTIVITIES AND INTERESTS

Notre Dame Rocketry Team: Communications Squad Leader and payload electronics engineer, PID control payload

S.T.E.M. Ambassador: On-campus peer tutor and mentor for engineering and science majors

F.I.R.S.T. Robotics: Member of the Wildstangs, 2010 - 2013, including 2011 World Champion team

Technical Interests: Linux, embedded systems, unique semiconductor materials, space exploration, robotics

Extracurricular Interests: Acoustic guitar, intramural football and basketball, reading, thinking, woodworking

Updated March 2016

416 Knott Hall, Notre Dame, IN 46556

T: (847)-962-1708 E: sryan8@nd.edu