

# Teal Dowd

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## **CURRENT ADDRESS**

2400 Yeager Rd. Apt #2  
West Lafayette IN 47906

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Cell: 206-261-5467

## **EDUCATION**

**Purdue University**, West Lafayette, IN

2014 - Present

Bachelor of Science: Mechanical Engineering 2018

Ph.D. Material Science, Class of 2022 **GPA** 3.08/4.00

## **PROFESSIONAL EXPERIENCE**

**Ph.D. Program at Purdue University**

2018 – Present

- Optimizing high-rate composite manufacturing equipment
- Performing research on hybrid additive manufacturing
- Leveraging desktop 3D printing for fixturing and robotic end effectors

**Research Assistant at Indiana Manufacturing Institute**

2017 - 2018

- Assisted in manufacturing and testing of carbon fiber pressed parts
- CNC machined aluminum pin brackets for testing
- Designed and manufactured molding tool for thermoset plastic tensile test coupons

**Artisan Fabrication Laboratory Mentor**

**West Lafayette, Indiana**

2014 - Present

- Mentor other students on machine safety and operation
- Guide students through project creation
- Learning how to use CNC mills and lathes, through IPS/VQC/CAM

**Process Engineering Intern, Medtronic**

**Warsaw, Indiana**

2016 (Fall)

- Developed an RFID badge based time tracking system with a raspberry pi
- Utilized Python to create a GUI for tracking system, and stored log data in an SQL database
- Wrote data filtering and sorting algorithms using VBA to sort 100,000+ lines of Excel data
- Provided integral support for engineering personnel

**IEEE Purdue Underwater Robotics Team**

**West Lafayette, Indiana**

2014 - 2016

- Designed components of an underwater robot in SolidWorks
- Machined parts on CNC and Waterjet
- Established our team's 3D modeling Product Development Management system
- Competed in Canada at the MATE Remotely Operated Vehicle world competition
- Primary member of the design manufacturing board

## **TECHNICAL SKILLS**

3D Modeling: Solidworks, Autodesk Inventor, PTC Creo, CATIA v5 (CAD and CAM)

Physical: TIG/MIG welding, manual and CNC mill, 3D printing (Original Prusa i3 MK2s)

Programming: MATLAB, IPS and VQC (CNC G-code), Python, VBA

Other: Flowpath, OMAX Layout, OMAX Make, SQL

## **AFFILIATIONS**

**Purdue Outing Club**

2014 - 2017

- Active member taking part in adventure races, outdoor climbing, and backpacking
- Planned two successful week long spring break backpacking trips
- Compete in a bouldering competition each year
- Volunteers twice yearly for the Muir Valley Trail Day
- Active rock climber (indoor and outdoor)