Corey O'Brien

(412)-401-2790 • obrie187@purdue.edu • 466 Niceville St. Pittsburgh, PA

Education	**Purdue University,** West Lafayette, IN.	*May 2023*

- Bachelor of Science in Aeronautical and Astronautical Engineering with a minor in Mathematics
- Cumulative GPA of 3.62/4.00; Dean's List and Semester Honors

Obama Academy of International Studies, Pittsburgh, PA. *June 2019*

- 4.0/4.0 unweighted GPA in International Baccalaureate classes
- Earned International Baccalaureate Diploma

Work Experience

Dave O'Brien and Son, Pittsburgh, PA. *June 2015 – August 2019*
Roofer

- Determined required materials and profit of roofing installation opportunities to maximize efficiency
- Constructed and repaired various styles of roofs and roofing accessories to ensure safety and efficacy of customer's buildings

Chateau Café and Cakery, Pittsburgh, PA. *May 2016 – October 2017*
Preparatory Chef

- Optimized storage and arrangement of café to promote efficient operation
- Collaborated with employees to arrange schedules and tasks
- Organized community outreach events to support other local small businesses

Leadership Experience

Purdue 3D Printing Club, West Lafayette, IN. *August 2019 – Present*
Lab Supervisor

- Coordinated operation of the Purdue Innovation to Ideas Learning Laboratory
- Communicated with clients to determine proper 3D model design and 3D printing considerations
- Demonstrated to incoming supervisors key elements of lab operation

Autonomous Robotics Club, West Lafayette, IN. *August 2019 – Present*
Mechanical Team Lead

- Led development of Project Impulse, an autonomous test drone to develop software
- Determined design for aerial system that will compete in the International Aerial Robotics Competition

Algebra by 7th Grade (AB7G), West Lafayette, IN. *August 2019 – Present*
Outreach Chair

- Designed lesson plans to teach and demonstrate technological skills to local elementary school students
- Taught Autodesk Inventor, Cura slicing software, Micro:Bit microcontrollers, and Scratch programming to promote STEM

CoderDojo, Lafayette, IN. *January 2020 – Present*
Volunteer Teacher

- Ensured the proper implementation of 3D printing hardware and software at the Lafayette Boys and Girls Club
- Instructed staff and members of the Boys and Girls Club on how to design, modify, and create 3D modeled objects to demonstrate the usefulness of additive manufacturing and product design

Purdue Engineering Presidents Council, West Lafayette, IN. *August 2019 – January 2020*
Representative

- Collaborated with Purdue engineering clubs to organize engineering week, dedicated to celebrating the profession of engineering
- Partnered with other club leaders to promote the welfare of every clubs' members

Technical Skills

C, Python, MATLAB, HTML, and CSS programming languages, Fusion 360, Solidworks, CATIA, Inventor, and OpenSCAD CAD software, advanced knowledge of additive manufacturing systems, proficient knowledge of small-scale electronics and microcontrollers