

# Benjamin S. Zeigler

Phone: 410-999-9999 | Portfolio: [www\[dot\]benzeigler\[dot\]com](http://www[dot]benzeigler[dot]com) | Email: [benzeigs@email.com](mailto:benzeigs@email.com)  
Home: 555 Vista Court, Anywhere, USA 55555 | College: Room 710, 555 W. Main St. Township, USA 22222

---

## EDUCATION

---

Aug. 2019-Present Mechanical Engineering, Northwestern University Evanston, IL  
Aug. 2015-May 2019 Devon-Philadelphia High School, PLTW Engineering ([www.pltw.org](http://www.pltw.org)) Devon, PA

---

## SKILLS AND QUALIFICATIONS

---

Exemplary engineering and problem-solving skills; able to identify problems and implement corrective processes; dynamic leader with strong communication skills; cooperative and excels in group settings

---

## PLTW ENGINEERING

---

### Project Lead The Way Engineering Curriculum (Aug. 2015-May 2019) Devon, PA

- **Principles of Engineering:** Designed, built, and tested ballistics device; Designed and built robot with machine control to complete a maze challenge and a “sprints” challenge
- **Engineering Design:** Built 3D puzzle cube with simple modeling features; Reverse engineered a skateboard through visual and functional analysis, disassembly, and modeling
- **Digital Electronics:** Designed a circuit with Boolean Algebra and a breadboard prototype to tabulate majority votes; Designed a circuit with state graph, state table, and state machine to build a robot arm to operate as a toll booth; Designed seven-digit LED display to show date of birth
- **Aerospace Engineering:** Designed and tested a balsa wood glider with specifications for horizontal and vertical stability; Designed and analyzed a titanium pipe fuselage for an aircraft frame
- **Civil Engineering and Architecture:** Used 3D architecture design software to design a residential house; Examined civil engineering challenges for water systems, plumbing systems, sewer systems
- **Engineering Design and Development:** Designed “Seraphim” football helmet with a microcontroller Bluetooth to monitor athlete body temperature; Used agile scrum project management system with project team; Identified problem statement, analyzed existing solutions, conducted research

---

## CARPENTRY

---

### Apprentice Carpenter, Vincent Bros. Carpentry (Jun. 2017-Present) Devon, PA

- Skills: House framing and demolition, window installation and removal, fiberglass insulation installation, siding and trim work, furniture design and construction

---

## ACTIVITIES AND AWARDS

---

### Eagle Scout, Boy Scouts of America (BSA), Troop 999 (Sep. 2007-Jul. 2019) Devon, PA

- Designed and built two foot bridges over a drainage swale, alleviated safety hazard, removed debris; Earned Three Eagle palms, Order of the Arrow, Arrow of Light, Quartermaster, 36 Merit Badges

### Work Group Leader, Habitat for Humanity Mission Trip (Jun. 2016-Jun. 2019) Multiple locations

- Annual youth-planned, youth-lead summer mission trip; work group leader for four peers
- Built 11 homes with Habitat for Humanity from June 2016-June 2019

### Offensive Lineman, Devon-Philadelphia High School Football (Aug. 2015-May 2019) Devon, PA

- Awards: Varsity Letter, Academic Excellence, Sportsmanship, Minds in Motion Scholar