

# SARAH BEDNAR

<http://sarahbednar.me>

213 Musket Circle • Lansdale, PA 19446 • (267) 645-9744 • shb66@pitt.edu

## EDUCATION

### UNIVERSITY OF PITTSBURGH

BS IN COMPUTER ENGINEERING

Minor in Economics

Expected April 2018 | Pittsburgh, PA

Cum. GPA: 3.76 / 4.0

## SKILLS

### TECHNICAL

Proficient:

Java • C •  $\text{\LaTeX}$

Novice:

Matlab • HTML/CSS •

Visual Basic • Android Dev

Software:

PSpice • Altera Quartus II • AutoCad •

Adobe InDesign

## COURSEWORK

### UNDERGRADUATE

- Clean Energy Grid Engineering: Scandinavia (Study Abroad)
- The Art of Making: Intro to Hands-On Systems Design and Engineering
- Advanced Digital Design Concepts
- Algorithm Implementation
- Intro to Computer Architecture
- Intro to System Software
- Data Structures
- Analysis and Design of Electronic Circuits
- Digital Logic; Digital Systems Lab

## SERVICE WORK

### Volunteer Income Tax Assistance (VITA)

Greeter 2013, 2014

### FBLA School Store

Cashier 2013, 2014

## ACTIVITIES

### Society of Women Engineers (SWE)

2014 - present

### Women in Computer Science (WiCS)

2015 - present

### Institute of Electrical and Electronics Engineers (IEEE)

2016 - present

## WORK EXPERIENCE

### ABB INC. | SYSTEMS ENGINEERING CO-OP

Jan 2016 – Aug 2017 | Natrona Heights, PA

- Created and fixed graphics for turbine HMI; performed Factory Assessment Test (FAT) testing the control system and logic
- Created bar chart and PV table for condition monitoring to be used in next Analyst release; Programmed with Visual Basic, C#, SQL
- Worked with Xilinx, AutoCad, SQL server, Teraterm, and ABB's Splus and Analyst
- Exposure to/worked on: FPGAs, pumps, relays, trips, digital & analog I/O

## RELEVANT PROJECTS

### POPQS: REINFORCED LANGUAGE LEARNING APP

STEELHACKS HACKATHON

February 2016

Developed a study app to encourage consistent review of material by having questions pop up every time you unlock your phone; programmed in Java and XML in Android Studio

### INTERACTIVE PERIODIC TABLE OF ELEMENTS

ENGR 0716 CAPSTONE PROJECT

April 2015

Fabricated a giant periodic table that displays additional information on a screen about a particular element when the element's button is pressed as installation art; programmed in Python

### THE DEFENDERS: PROMOTING DIVERSITY IN GAMING

SHE INNOVATES HACKATHON

January 2015

Developed a positive, fun game that challenges stereotypes and the lack of diversity in the gaming industry

### MR. ROBOTO: THE INFRARED FINDER

ROSE HULMAN OPERATION CATAPULT

July 2013

Created a robot that autonomously drives and stops at an infrared emitting ball; programmed in C

## LEADERSHIP

### SOCIETY OF WOMEN ENGINEERS (SWE)

WOMEN IN STEM CONFERENCE CO- CHAIR

Nov 2016 - Jan 2016

Organized annual conference on the topic of empowering females in STEM for University of Pittsburgh students and professionals in the Pittsburgh community

OUTREACH EVENT ACTIVITY LEADER

Jan 2015 - present

Plan and lead hands-on, engineering related activities for K-12 children in the Pittsburgh community

## HONORS & AWARDS

SteelHacks Hackathon: **Third Place & Best Education/Language Hack** Feb 2016  
Honor Student Swanson School of Engineering 2014 - present

She Innovates Hackathon: **First Place** and **Most Creative**

January 2015

**National AP Scholar**

August 2014

Pittsburgh Foundation Wellington C. Carl Scholarship

2014 - 2018

James J. Kerrigan Memorial Scholarship

2014 - 2018

Mary Snyder Ziegler Scholarship

2014 - 2018

Sabre Systems STEM Scholarship Award

2014 - 2015

North Penn Area Scholarship Fund Association Scholarship

2014 - 2015

Bausch + Lomb Honorary Science Award

June 2013