

# SARAH BEDNAR

<http://sarahbednar.me>

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## EDUCATION

### UNIVERSITY OF PITTSBURGH

BS IN COMPUTER ENGINEERING

Minor in Mathematics and Economics

Expected April 2018 | Pittsburgh, PA

Cum. GPA: 3.74 / 4.0

## SKILLS

### TECHNICAL

Proficient:

Java • C • Matlab •  $\LaTeX$

Novice:

Python • HTML/CSS • Android Dev

Learning:

Javascript • Scala • SQL

Software:

PSpice • Altera Quartus II • Adobe

InDesign

## COURSEWORK

### UNDERGRADUATE

- The Art of Making: Intro to Hands-On Systems Design and Engineering
- Computer Organization and Assembly Language
- 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

Math Club

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 – Present | Natrona Heights, PA

- Created and fixed graphics for turbine HMI; performed Factory Assessment Test (FAT) testing the control system and logic
- Gained familiarity of complex schematics; modified VHDL and C code for new DCS module for turbine control and condition monitoring
- Worked with Xilinx, AutoCad, 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. ROBOT: THE INFRARED FINDER

ROSE HULMAN OPERATION CATAPULT

July 2013

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

## LEADERSHIP

### SOCIETY OF WOMEN ENGINEERS (SWE)

ACTIVITY LEADER

2016 - present

Teach and lead STEM activities to encourage younger student to pursue careers in Engineering for several outreach events

### ACADEMIC DISCUSSION & PEER TUTORING (ADAPT)

PRESIDENT

2012 - 2014

Chartered club, planned meetings, led discussions, tutored in math and chemistry

## 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