# SARAH BEDNAR

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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 • ŁTFX

Novice:

Python • HTML/CSS • Android Dev

Learning:

AutoCad • Scala • Javascript

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. ROBOTO: 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 H	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