# 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 • ŁTFX

Novice:

Matlab • HTML/CSS •

Visual Basic

Android Dev

Learning:

Javascript • Go

Software:

PSpice • Altera Quartus II • AutoCad • Adobe InDesign

## **COURSEWORK**

#### **UNDERGRADUATE**

- 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

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 - 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  $\ensuremath{\mathsf{C}}$ 

## **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 F	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