# SARAH BEDNAR

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### **EDUCATION**

#### UNIVERSITY OF PITTSBURGH

BS IN COMPUTER ENGINEERING Minor in Economics August 2018 | Pittsburgh, PA summa cum laude

Cum. GPA: 3.78 / 4.0

# INTERNATIONAL

### **EXPERIENCES**

# NATIONAL UNIVERSITY OF SINGAPORE

Non-Graduating Exchange

Spring 2018 | Singapore

# CLEAN ENERGY GRID ENGINEERING: SCANDINAVIA

May 2017 | Denmark & Sweden Awarded:

- Swanson School of Engineering Study Abroad Scholarship
- Study Abroad Office Scholarship

### **SKILLS**

#### **TECHNICAL**

Proficient:

Java • C

Novice:

Python • C++ • OpenGL • Android Dev Tools:

# **COURSEWORK**

#### **ELECTIVES**

- Embedded Systems Design
- Software Quality Assurance
- Computer Graphics
- Computer Networks
- Signals and Systems
- The Art of Making: Intro to Hands-On Systems Design and Engineering

# **ACTIVITIES**

Generative Art and Adversarial Networks (GAAN)

2018 - present

Society of Women Engineers (SWE)

2014 - present

Women in Computer Science (WiCS)

2015 - 2018

## **WORK EXPERIENCE**

#### HARRIS CORPORATION | EMBEDDED SOFTWARE ENGINEER

C++, Python, Java

June 2018 - Present | Palm Bay, FL

- Focus on embedded software design, integration, and testing for real-time digital maps that provide advanced situational awareness for safety-critical flights
- Develop python tools to automate routine tasks and test software quality

#### **ABB INC.** | Systems Engineering Co-op

C, VHDL, AutoCAD

Jan 2016 - Aug 2017 | Oakmont, PA

- Supported customer projects for turbine control systems in power generation
- Designed and assembled Condition Monitoring demo kit to be mass produced for sales shows around the world
- Designed DCS Lab test panel (layout, wiring, BOM) for internal testing
- Created and fixed graphics for turbine HMI

### **RELEVANT PROJECTS**

#### PROJECT ABRACADABRA: LOCKLESS BOX

JAVA, RASPBERRY PI

Dec 2017

Fabricated a puzzle lock box with no discernable unlocking mechanism (i.e. locks or keypad) and developed a companion android app for multi-factor authentication

#### POPQS: REINFORCED LANGUAGE LEARNING APP

Java, Android Studio

Feb 2016

Developed a study app to encourage consistent review of material by having questions pop up every time you unlock your phone

#### INTERACTIVE PERIODIC TABLE OF ELEMENTS

PYTHON, RASPBERRY PI

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

#### MR. ROBOTO: THE INFRARED FINDER

C, PIC MICROCONTROLLER

July 2013

Created a robot that autonomously drives and stops at an infrared emitting ball

# **LEADERSHIP**

# SOCIETY OF WOMEN ENGINEERS (SWE)

OUTREACH EVENT ACTIVITY LEADER

Jan 2015 - Dec 2019

Planned and led hands-on, engineering related activities for K-12 children in the PA and FL community impacting 400+ youths; Dedicated 100+ volunteer hours

Women in STEM Conference Co- Chair

Nov 2016 - Jan 2017

Organized annual conference (80+ attendees) on the topic of empowering females in STEM for the Pittsburgh community; Recognized as the **OCC event of the year** 

SOCIAL CHAIR

Aug 2017 - May 2018

Coordinated fun events to foster strong relationships among societal members

# **HONORS & AWARDS**

Outside the Classroom Curriculum (OCC) Honor Society	Dec 2017
CodeDay Hackathon: Best Application	Nov 2017
Anita Borg Institute Grace Hopper Celebration Student Scholar	Oct 2017
SteelHacks Hackathon: Third Place & Best Education/Language Hack	Feb 2016
She Innovates Hackathon: First Place and Most Creative	Jan 2015
Honor Student, Swanson School of Engineering	2014 - 2018
National AP Scholar	Aug 2014