# **SAHIL MODI**

URH 291 Snyder | 206 E Peabody Drive | Champaign, IL 61820 smodi9@illinois.edu | (847) 890-3506

EDUCATION SKILLS

University of Illinois at Urbana-Champaign

Undeclared: Pre-Engineering (Computer Science)

**GPA** | 4.00/4.00

May 2021 | Sophomore Standing

• Taking CS 225: Data Structures

James Scholar Honors

Proficient | Android Development + Java
Proficient | Computer-Aided Design (Autodesk Inventor)
Proficient | C++
Intermediate | Python, HTML
Intermediate | Autonomous Control Systems

#### PROFESSIONAL EXPERIENCE

**Distributed Autonomous Systems Laboratory** (Urbana, IL)

Undergraduate Researcher, Jan 2018 - Present

- Developed scripts for autonomous software
- Aided in developing tests for the software

# Knowles Electronics (Itasca, IL)

Intern, June 2016

- Built and configured a Linux cluster
- Tested microcontrollers with an oscilloscope
- Found IC chips to test microphones

### **PROJECT HIGHLIGHTS**

# Capstone CS Project: FaceTunes | Lead Developer

An app that plays a song based on current mood

- Machine learning detects emotions in an image
- Strongest emotion picked to play a song
- Spotify integration with specific mood playlists

# Capstone Project: Bluetooth Light Switch | Team Lead

An Internet of Things solution to wireless lighting

- Facilitated communication and delegated tasks
- Installable without removal of the current fixture
- Arduino, Bluetooth 2.0, and 9g servo motor

#### **LEADERSHIP AND ACTIVITIES**

# Engineering Freshmen Council (2017 - Present)

IT Chair, 2017 - Present

Designed and maintained the RSO website

# iRobotics Midwestern Robotics Design Competition (2017 – Present)

Subsystem Lead, Software Team, 2017 - Present

- Designed and built the robot's intake system
- Developed code to control various subsystems of the robot

ACM SIGBot (2017 - Present)

Software Team, 2017 - Present

• Develop a fully autonomous underwater vehicle

**Vex Robotics** (2014 – 2017)

Lead Programmer, 2015 – 2017 | State Finalist 2015, 2016 | 3rd at Regionals 2017

- Programmed best-in-state autonomous mode that scored 35% of the team's total score in 15 seconds
- Conducted research on Proportional Integral Derivative (PID) and PTC speed control systems

St. Alexius Medical Center (Hoffman Estates, IL) | Volunteer, March – August 2017 (60+ hours)

Delivered medication from the pharmacy







