# **SAHIL MODI**

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## **EDUCATION**

### University of Illinois at Urbana-Champaign

Undeclared: Pre-Engineering (Computer Science)

**GPA:** 4.00/4.00

May 2021 | Sophomore Standing

• Taking CS: Data Structures

James Scholar

### **Bartlett High School**

Magnet STEM Academy **GPA** | 4.57/4.00, 3.71/4.00

Top 5% in class

#### PROFESSIONAL EXPERIENCE

## Knowles Electronics (Itasca, IL)

Intern, June 2016

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

#### **SKILLS**

Proficient | Android Development + Java

Proficient | Computer-Aided Design (Autodesk Inventor)

Intermediate | Python, HTML, CSS, JavaScript Intermediate | Autonomous Control Systems

## **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

• Creating an EFC Website

# iRobotics Midwestern Robotics Design Competition (2017 – Present)

Software Team, 2017 - Present

Designing a robot from scratch to compete against regional universities

## ACM Illinois Programming League (2017 - Present)

Freshman Division, 2017 - Present

**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
- Wrote gyro and motor encoder libraries for future members of the club
- 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







