

# 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

### 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 | 3<sup>rd</sup> 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
- Successfully taught Robot-C programming to 30+ new members
- 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



Google Play Store: smApps

<http://sahilmodi.me>

