

# 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 225: Data Structures
- James Scholar Honors

### 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)

**Proficient** | C++

**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

- Designed and maintained the RSO website

### iRobotics Midwestern Robotics Design Competition (2017 – Present)

**Subsystem Lead, Software Team**, 2017 – Present

- Designing a robot from scratch to compete against regional universities
- Developing code to control various subsystems of the robot

### ACM Illinois Programming League (2017 – Present)

**Freshman Division**, 2017 – Present

- Develop various algorithms to complete a problem set

### 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
- 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



Play Store: smApps



github.com/sahilmodi



linkedin.com/in/sahil-modi



sahilmodi.me