

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

