

# SAHIL MODI

URH 291 Snyder | 206 E Peabody Drive | Champaign, IL 61820  
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## EDUCATION

### University of Illinois at Urbana-Champaign

Undeclared: Pre-Engineering (**Computer Science**)

CS 225 (Data Structures) | James Scholar Honors

May 2021

GPA | 4.00/4.00

## PROFESSIONAL EXPERIENCE

### Distributed Autonomous Systems Laboratory, *Undergraduate Research Assistant*

Jan 2018 – Present

Urbana, IL

- Conducting research on autonomous algorithms and decision making for navigation
- Developing tests that simulate real-time performance in the field
- Designing a fully-autonomous robotic solution to phenotype crops in a plot of farmland

### Knowles Electronics, *Software Engineering Intern*

June 2016

Itasca, IL

- Fully built and configured a Linux cluster to be used as a database
- Tested microcontrollers against rated specifications with an oscilloscope
- Researched IC chips to be implemented in microphone testing PCBs

## 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

- Redesigned the EFC main website
- Created and managed individual committee pages

### ACM SIGBot | 2017 – Present

*Software Team*

- Develop a fully autonomous underwater vehicle

### iRobotics MRDC | 2017 – Present

*Subsystem Lead, Software Team*

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

### Vex Robotics | 2014 – 2017

*Lead Programmer*, 2015 – 2017 | **State Finalist** 2015, 2016

- Programmed 15 second fully-autonomous mode
- Researched Proportional Integral Derivative control

### St. Alexius Medical Center | 2017

*Volunteer*, March – August 2017

- 80+ service hours
- Delivered medication from the pharmacy

## SKILLS

**Proficient** | C++, Java, Android Development

**Intermediate** | Python, CAD (Autodesk)



Play Store: smApps



github.com/sahilmodi



linkedin.com/in/sahil-modi



sahilmodi.me