

SAHIL MODI

URH 291 Snyder | 206 E Peabody Drive | Champaign, IL 61820
smodi9@illinois.edu | (847) 890-3506

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
- Collaborating on a fully-autonomous robotic solution to phenotype a plot of crops

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
- Used an 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)

