

# Rishabh Agrawal

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## Education

### Indiana University

B.S. IN COMPUTER SCIENCE, B.S. IN INTELLIGENT SYSTEMS ENGINEERING | GPA 3.95

Hutton Honor's Program and Dean's List

Bloomington, IN

Aug. 2018 - May 2022 (Exp.)

## Industry Experience

### Robotrix India

Apr. 2018 - Jul. 2018

#### INSTRUCTOR

- Taught over 50 students from high schools and colleges at the state's largest Robotic Institute.
- Instructed students in the development of C and Embedded C programs.
- Taught interfacing with Arduino micro controllers.

### Home Automation

Nov. 2017 - Jan. 2018

#### FREELANCE CONTRACTOR

- Developed and produced low cost home automation devices built to be interfaced with a mobile application and the Google Assistant.
- Designed the PCB using Eagle design software and produced over 100 circuit boards.
- Used NodeMCU to control light brightness and fan speeds.

## Projects

### Humanoid Robot

Apr. 2018 - May 2018

#### MAKER

- Designed a mobile humanoid robot capable of 20 major human movements/actions.
- Tailored the robot by 3D printing all its parts and programmed an Arduino to control movements using a mobile application.

### Teen Techers

Jun. 2016 - Jan. 2018

#### FOUNDER

- Launched a YouTube channel with simple tutorials for C programming and small Arduino projects.
- The videos are now a part of the curriculum for middle school students at the Riverside School.
- Received over 84,000 views and counting.

### Arduino Projects

Jun. 2017 - Sep. 2017

#### MAKER

- Designed a drone by programming an Arduino that used a brushless DC motor. Added a wireless camera to view remotely.
- Used OpenBCI to make a 3D printed arm move just by thinking.
- Built a 3D printed robot interfaced by an Arduino that mimics hand movements read from flex sensors in a glove.

## Technical Skills

- **Proficient Languages:** C, Python, C++, Racket, and Embedded C
- **Web development:** HTML, JavaScript, and CSS
- **Other Languages:** Java and L<sup>A</sup>T<sub>E</sub>X

## Academic Experience

### Indiana University

Bloomington, IN

TEACHING ASSISTANT, CSCI 211, INTRODUCTION TO COMPUTER SCIENCE

Jan. 2019 - Present

- Taught in discussion sections and held office hours to guide students through the course.
- Helped redesign components of the course and design homework projects for students

## Clubs/Organizations

- **Computer Science and ICSA Club** - Participated in all the events and Hackathons held by the club.
- **Basketball** - State level Basketball player in high school and pursuing it in college as well.
- **eSport Dota 2** - Our team ranked in the top 16 in India for the ESL tournament