

# Ribhav Kapur

Computer Science Specialist from University of Toronto

## Personal Info

### Phone

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### E-mail

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### WWW

<http://www.ribhavkapur.com>

## Relevant Coursework

Multi-Variable Calculus

Software Design

Theory of Computation

Computer Organisation

Software Tools and Systems Programming

Data Structures and Analysis

Introduction to AI

Introduction to ML

Introduction to Visual Computing

Databases

Programming on the Web

Numerical Methods

Algorithm Design, Analysis and Complexity

Operating Systems

## Skills

Python

Experienced

Java

Experienced

C

Experienced

HTML/CSS

Experienced

Javascript

Familiar

Assembly

Good

Swift

Good

## Languages

English

Native Speaker

Hindi

Native Speaker

Bengali

Proficient

## Experience

present

### CEO and Co-Founder

*Connct*

- A platform to help social media influencers increase reach and engagement
- Received first investment offer in July for 100k

present

### Software Engineer

*Robotics for Space Exploration (RSX)*

- Currently working on GPS integration for the Mars rover we are developing using ROS Kinetic.
- Working with rtab map to map the surroundings of the rover as it traverses through terrain

present

### Teaching Assistant

*Undergraduate Artificial Intelligence Group*

- Working on the syllabus for an introductory AI course
- Working on organising an AI hackathon at UoT

present

### Computer Science Learning Community

*Faculty of Computer Science - University of Toronto*

- 1 of 38 to be admitted into the community from the entire faculty.
- Working on various projects and internships throughout the year.

present

### Peer Mentor

*University of Toronto*

- One of the few selected students to mentor other students in my Theory of Computation class.

Apr 2016

### Head of Entertainment

*Krayons for Kargil*

- Organisation held an event to raise funds for the underprivileged in Kargil (India).
- Raised rupees 16 lakh (nearly \$30,000).

## Education

### University of Toronto - Bachelor of Science

1. Computer Science specialist with a focus in:

- Artificial Intelligence
- Web and Internet Technologies
- Game Design

2. Minor in Mathematics

### The Shri Ram School Aravali, India

- Indian School Certificate
- Graduated with a 92%.

### Duke TIP

Was one of the 100 students from India to be selected for the Duke TIP program. I studied mechanical engineering the first time in India, and went to Georgia tech to do a short course on spacecraft design.

## Projects

Feb 2019

### Security Drone

- Autonomous GPS enabled drone.
- Security drone to replace students who escort people on campus at night.
- Image processing on server to recognise and follow user.
- Aggression detection algorithm to sense danger and alert authorities.

Jun 2018

### Virtual Trainer

- Generates a workout for you.
- Designed using a smart algorithm to hit every area and function of the muscle(s).
- Working on 3d models to show exercise form in VR.

Jul 2018

### Retro Fighter

- Simplistic fighting game between 2 players.
- Implementation of a smart AI player using graph theory that is unbeatable.

Aug 2018

### My Website

<http://www.ribhavkapur.com>

This is my website where I showcase all my projects, display my transcript and other test scores and have links to all my social media accounts including LinkedIn.

Sep 2018

### Sound Sensitive LED Light Strip

- Detects sound frequency.
- Propagates a specific light colour based on the frequency in a wave form through a strip of LED lights.
- Detects volume to adjust brightness.

### In Progress

- Working on a machine learning algorithm that takes different brain waves as inputs and detects emotion. (future plans to extend the project).
- Working on a machine learning algorithm to detect handwriting to help with assignments as opposed to using latex or microsoft word, etc.
- Intermittently making my own version of linux from source code.

## Hackathons

Feb 2019

MakeHarvard Top 5 for making the security drone mentioned above

Sep 2018

OrbisChallenge Hackathon Top 5 for writing AI that plays splix.io