

# ADITYA THAKRAL

🌐 <http://a.ditya.me>  
✉ [aditya.thakral@uwaterloo.ca](mailto:aditya.thakral@uwaterloo.ca)  
🌐 [linkedin.com/in/99at8](https://www.linkedin.com/in/99at8)  
🐙 [github.com/9at8](https://github.com/9at8)

## SKILLS

### PROFICIENT IN

Python, Racket, Git, MySQL,  
HTML5, CSS3, Adobe Photoshop,  
and, Adobe Premier Pro

### FAMILIAR WITH

Haskell, JavaScript, Shell, C, C++

### HARDWARE

Leap Motion, Raspberry Pi

## EDUCATION

### UNIVERSITY OF WATERLOO

- 1B – Computer Science Co-op
- Sep 2016 – Apr 2021 (Expected)

### AMITY INT'L SCHOOL, INDIA

- Grade 12 Cumulative: 92.2%

## AWARDS

- **First Place** and  
**Most Innovative Hack** for  
**Sign Language Translator** at  
Electric City Hacks by  
Trent University
- **Top 10%** in **Euclid Contest**  
University of Waterloo
- **Best Graphics (Twice)** and  
**Best Educational Poster**  
High School Newspaper
- **Excellence in C.S.**  
High School – Grade 11

## EXPERIENCE

### FRONTEND DEVELOPER • ERIGERON ENERGY • JUN 2016 – AUG 2016

- Developed a solar savings calculator using **HTML5**, **CSS3**, and **JS**
- Managed and added features to their WordPress website

### CHIEF GRAPHICS EDITOR • THE GLOBAL TIMES • JAN 2012 – JAN 2016

- Created graphics, edited illustrations, and managed graphics editors for school newspaper using **Adobe Photoshop**

## PROJECTS

### SIGN LANGUAGE TRANSLATOR

- Led a team to build a **Python** application that translates American Sign Language to Speech and Text, to make communication for Mute people easier
- Analyzes raw vector data of positions of hands using a **Leap Motion sensor** to output meaningful words as speech and text
- Implemented **Google Text to Speech**
- Built using **Orion API** from Leap Motion

### SYNK

- Synchronizes files and folders both offline and cloud (Google Drive)
- Uses **Python**, **shutil** module and the **Google Drive REST API**
- Maintains a JSON file to store a list of directories to synchronize
- Implemented **recursive synchronizing** of directories

### EMERGENCY BROADCAST • SCI 206 PROJECT

- Broadcasts Text messages as sound over the FM range
- Modified the transmitter antenna to broadcast Radio Signals along all three axes
- Uses **Python**, **Raspberry Pi 2**, and **Google Text to Speech**

### PYMESSANGER

- A basic **text messenger** on the Local Area Network
- Uses **Python** and the **socket** library

### MYSQL MANAGER • HIGH SCHOOL PROJECT

- Interface for **MySQL** which performs various tasks such as creating, altering, dropping tables, and inserting and deleting data into tables
- Generates and logs queries based on input from the user
- Uses **Python** and the **MySQL Connector** module

## ACTIVITIES

### TILT AMBASSADOR • DEC 2016 – PRESENT

- Selected as a Tilt Ambassador for University of Waterloo

### CYBER CONGRESS • CO-FOUNDER • JAN 2014 – JAN 2016

- Spread awareness about cyber security and recommended certain steps to stay safe online

### INDEPENDENT I • VOLUNTEERING • APR 2013 – MAR 2014

- Taught and organized teaching lessons for vocational skills like baking, pottery, and salon skills to help unemployed women