

# YUNKUN (RICKY) LU

Carnegie Mellon University Junior, Computer Science/Computational Finance

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<https://github.com/PaperbagLife>

## PROJECTS

### Couple Trouble

#### Computer Vision 2D Game

Feb 2020–Present

- Computer Vision detects distinct colors for 2 player game
- Best Valentines Hack award in Tartan Hacks

### CVShooter

#### Computer Vision Top-Down Shooter Game

Apr 2019

- 112 Term Project (96.6%)
- Computer Vision controlled top-down shooter game on Pygame
- Color detection and object tracking

## EXPERIENCE

### Evaluating the Validity of Automatic Speech Recognition Technologies for Online Medical Counseling

#### Independent research

May 2020 - present

- Transcribe medical videos using Automatic Speech Recognition(ASR) APIs from Google, IBM, Microsoft
- Evaluate the APIs using word error rate and Levenshtein distance
- Identify and evaluate factors that affect ASR performances

### International English Support & Education

Feb 2016 – August 2018

- Taught English to Chinese students through video calls
- Learned about many unique, local Chinese cultures

### Organizer of Arcade Hackathon

April 2018

- Organized city-wide hackathon attended by highschool students
- Obtained funding for food and prizes from contacting local companies for sponsors

### School representative for Engineering Without Borders

May 2017–May 2018

- Arranged workshops at my school to inspire future engineers
- Further communications ensured an annual talk/workshop

## EDUCATION

### B.S.in Computer Science, Minor in Comp Finance

2018-May 2022

Pittsburgh, PA

GPA - 3.80/4.00

Selected coursework:

- 15-251: Theoretical Computer Science
- 15-213: Intro to Computer Systems
- 15-210: Data Structures and Algorithms
- 21-380: Mathematical Modeling

In progress:

- 21-370: Discrete time Finance
- 15-281: Artificial intelligence
- 10-315: Machine Learning

## PROGRAMMING LANGUAGES

Python

C

SML



## SKILLS

Video Editing

Data visual production

Photoshop

OpenCV (Computer Vision)

Google Cloud API

IBM Wattson API

Microsoft Azure API

Pygame

Sockets

HTML

Unity

## INTERESTS

Computer Vision

Autonomous Vehicles

VR

Game Design

Speech recognition

Accessibility support for games

## LANGUAGES

Chinese (Mandarin)

English

Japanese

