

# YUNKUN (RICKY) LU

Carnegie Mellon University 2022, B.S. in Computer Science, Minor in Computational Finance

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📍 Pittsburgh, PA

in <https://www.linkedin.com/in/yunkun-lu/>

🌐 <https://github.com/PaperbagLife>

<https://paperbaglife.github.io>

🇳🇿 Citizenship: New Zealand

## EXPERIENCE

Software Engineer/EngProd at Arista Networks

**Python, Java, Go, Kubernetes**

📅 June 2021 - Present

- Reduced CPU usage of computer cluster by migrating existing service to run on Kubernetes
- Reduce space needed by database by 70% by reformatting excessive verbose logging into JSON string
- Automated deploying new changes to services by setting up a Spinnaker pipeline for Kubernetes

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

**Python, Google Cloud, Microsoft Azure, IBM Watson, CMU Sphinx**

📅 May 2020 - present

- Conducting self-directed research
- Transcribing medical videos using Automatic Speech Recognition(ASR) APIs from Google, IBM, and Microsoft
- Evaluating the performance of the APIs using word error rate and Levenshtein distance
- Identifying and evaluate factors that affect ASR performances

School representative for Engineering Without Borders

📅 May 2017–May 2018

- Became the school ambassador for EWB and arranged workshops at my school to inspire future engineers
- Set up annual talks for students in STEM at my school by communicating with EWB

## PROJECTS

Shop Simulation

**C#, Unity**

📅 Jan 2021 - Present

- Creating a fully animated 3D simulation for shoppers exploring a shop and track their paths
- Using Unity Navigation system to make pathing realistic
- Using Final IK to make real-time animation for shopper's 3D model

CVShooter

**Python, Pygame, OpenCV**

📅 Apr 2019 - May 2019

- Wrote 1000 lines of well-documented code in Pygame
- Player controls with object tracking and color detection for added interactivity
- Object oriented design for different enemies and items

## EDUCATION

Carnegie Mellon University

B.S. in Computer Science,

Minor in Computational Finance

📅 2018-May 2022

📍 Pittsburgh, PA

GPA - 3.79/4.00

Notable coursework:

- Theoretical Computer Science
- Intro to Computer Systems
- Data Structures and Algorithms
- Mathematical Modeling
- Discrete/Continuous time Finance
- Artificial intelligence & Problem Solving
- Intro to Machine Learning
- Distributed Systems
- Computer Graphics

## SKILLS

Kubernetes Python NumPy  
C/C++ Java GoLang Unity  
LaTeX Final IK Video Editing  
Visual Data production Photoshop  
OpenCV (Computer Vision)  
Google Cloud API IBM Watson API  
Microsoft Azure API Pygame

## INTERESTS/HOBBIES

Computer Vision VR Game Design  
Speech Recognition Violin  
Accessibility support for games  
Video editing Origami

## LANGUAGES

English: Native Speaker

Chinese: Native Speaker

Japanese: Beginner