

# YUNKUN (RICKY) LU

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

@ yunkunL@alumni.cmu.edu  
https://paperbaglife.github.io

📍 Palo Alto, CA  
📄 Citizenship: New Zealand

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

🔗 https://github.com/PaperbagLife

## EXPERIENCE

Software Engineer at Clockwork Systems, Inc

**Golang, Typescript, Vue, Python, influxDB, NCCL**

📅 July 2022 - Present 📍 clockwork.io

- Worked with a team to optimize & accelerate networking fabric for AI/ML training.
- Set up and managed high-power-computing servers for RDMA workloads.
- Worked with a team to design and program the UI platform for the software services.
- Made scripts and tools used daily by engineers, speeding up configuration flow by more than 80%.

Software Engineer/EngProd at Arista Networks

**Python, Java, Go, Kubernetes**

📅 June 2021 - Aug 2021

- Reduced CPU usage of bare-metal clusters by migrating existing service to run on Kubernetes
- Reduce space needed by database by 70% by reformatting excessive verbose logging into JSON string
- Automated CICD 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 - August 2020

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

## PROJECTS

Shop Simulation

**C#, Unity**

📅 Jan 2021 - Feb 2021

- Created a fully animated 3D simulation for shoppers exploring a shop
- Employed Unity Navigation system for path finding and simulating avoidance between shoppers
- Generated heat map for most visited areas for common shop routes and help optimize shop layout

## EDUCATION

Carnegie Mellon University

B.S. in Computer Science,  
Minor in Computational Finance

📅 2018 - 2022 📍 Pittsburgh, PA

GPA - 3.80/4.00

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 NCCL Golang  
Python Vue Typescript/CSS  
Serial/Minicom Grafana C/C++  
Unity Google Cloud API  
LaTeX

## INTERESTS/HOBBIES

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

## LANGUAGES

English: Native Speaker  
Chinese: Native Speaker