

# YUNKUN (RICKY) LU

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

📍 Palo Alto, CA    in <https://www.linkedin.com/in/yunkun-lu/>  
📄 Citizenship: New Zealand

🔗 <https://github.com/PaperbagLife>

<https://paperbaglife.github.io>

## EDUCATION

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

📅 2018 - 2022

📍 Pittsburgh, PA

GPA - 3.80/4.00

Distributed Systems, Artificial intelligence & Problem Solving, Design and Analysis of Algorithms, Mathematical Modeling

## EXPERIENCE

Software Engineer at Clockwork Systems, Inc

📅 July 2022 - July 2025

📍 [clockwork.io](https://clockwork.io)

- Set up (rack and stack) and managed high-power-computing servers with Infiniband and RoCE NICs. Optimized and accelerated networking fabric for AI/ML Training through a NCCL Plugin.
- Developed a full-stack internal web platform with Flask and Vue/TypeScript to surface live cluster status, documentation, and diagnostic tools.
- Collaborated with a cross-functional team, including designers and PMs, to build and maintain a customer-facing UI platform in Vue/TypeScript, delivering new features based on user feedback and release cycles.

Software Engineer at Arista Networks

📅 June 2021 - Aug 2021

- Reduced CPU usage of bare-metal clusters by migrating existing service to run on Kubernetes.
- Designed and implemented CI/CD pipeline to automate deployment of new builds to Kubernetes clusters, reducing manual intervention.
- Reduce space needed by database by 70% by reformatting excessive verbose logging into JSON string.

## PROJECTS

Unity Shop Simulation

📅 Jan 2021 - Feb 2021

- Created a fully animated 3D simulation using Inverse Kinematics for shoppers exploring a shop.
- Employed Unity Navigation system for path finding and simulating avoidance between shoppers.
- Generated heat map for most visited areas to simulate customer behavior and improve retail layout design

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

📅 May 2020 - August 2020

- 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 evaluated factors that affect ASR performances, including distance from sound source and type of content.

## SKILLS

Python

C/C++

NCCL

RDMA

Serial/Minicom

Kubernetes

Shell scripting

Vue/Typescript

Grafana

## LANGUAGES

English: Native Speaker

Chinese: Native Speaker