# YUNKUN (RICKY) LU

**Carnegie Mellon University 2022, B.S. in Computer Science**
**University of Southern California 2027, M.S. in Computer Science**

Palo Alto, CA | https://www.linkedin.com/in/yunkun-lu/ | https://github.com/PaperbagLife | https://paperbaglife.github.io

## EDUCATION

### University of Southern California M.S. in Computer Science

2025 - 2027 | Los Angeles, CA

### 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

- 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 Intern 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