# YUNKUN (RICKY) LU

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

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https://paperbaglife.github.io  Citizenship: New Zealand

## 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 - Present  clockwork.io

- Worked with a team to optimize & accelerate networking fabric for AI/ML training. Made scripts and tools used daily by engineers, speeding up configuration flow by more than 80%
- Made an utilities website hosting documentation, live cluster status and troubleshoot guides.
- Set up and managed high-power-computing servers for RoCE workloads using NCCL.
- Worked with a team to design and program the UI platform in Vue/Typescript for software services.

### Software Engineer at Arista Networks

June 2021 - Aug 2021

- Reduced CPU usage of bare-metal clusters by migrating existing service to run on Kubernetes. Setup CICD pipeline to deploy new builds automatically to Kubernetes.
- 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 for common shop routes and help optimize shop layout.

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

## SKILLS

Python | C/C++ | NCCL | RDMA | Serial/Minicom | Kubernetes | HTTP/HTTPS | Vue/Typescript | Grafana

## LANGUAGES

English: Native Speaker
Chinese: Native Speaker