YUNKUN (RICKY) LU

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

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☐ Citizenship: New Zealand

EXPERIENCE

Software Engineer at Clockwork Systems C++, Go, Python, Java, Bazel, Kubernetes

July 2022 - Present

PA. CA

- clockwork.io
- Worked with bazel build system to manage dependency and streamline build process
- Building software based on an accurate software based time synchronization algorithm

Software Engineer/EngProd at Arista Networks Python, Java, Go, Kubernetes

🛗 June 2021 - Aug 2021

- 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

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 for pathing and simulate avoidance between shoppers
- Using Final IK to make real-time animation for shopper's 3D model
- Generate heat map for most visited areas for common shop route and help optimize shop layout

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 Grafana Python | | |
|---------------------------------|--|--|
| NumPy C/C++ Java Golang | | |
| Unity LaTeX Bazel Video Editing | | |
| 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