YUNKUN (RICKY) LU

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

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⬡ https://github.com/PaperbagLife   https://paperbaglife.github.io   ▤ Citizenship: New Zealand

EXPERIENCE

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

CVShooter

Python, Pygame, OpenCV

📅 Apr 2019 - May 2019

- Wrote 1000 lines of well-documented code in Pygame
- Player controls with object tracking and color detection for added interactivity
- Implemented dynamic difficulty for players of all skill-level
- Object oriented design for different enemies and items

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   Python   NumPy   C/C++   Java   Golang   Unity   LaTeX   Final IK   Video Editing   Visual Data production   Photoshop   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