Mincan Yang

https://mincany.myportfolio.com | https://github.com/ymcmatt | mincany@andrew.cmu.edu | (256)288-6340.

EDUCATION

Carnegie Mellon University, Entertainment Technology Center (ETC) Pittsburgh, PA

- Master of Entertainment Technology (Computer graphics track) *Expected May 2022*

Boston University Boston, MA

- Double major: B.A. Computer Science & B.A. Mathematics *May 2020*
- Courses: Full-Stack Development, Advanced Computer System, Algorithm, Computer Graphics, Machine Learning, etc

SKILLS

- **Languages**: Golang, C++, Python, JavaScript, C#, Java
- **Technology**: Kubernetes, AWS, Postgres, Cassandra, Unity, Unreal 4, Angular, MySQL, PyTorch, OpenGL

PROFESSIONAL EXPERIENCE

Apple Inc. **(**https://www.apple.com/) *May. 2021 - Dec. 2021*

Software Engineer Intern | Cupertino, CA

- Developed a platform to dynamically build, deploy and manage general-purpose Machine Learning tasks on Kubernetes
- Developed an efficient architecture that fetch/decrypt/extract/communicate Terabytes level of data between object storage and Kubernetes pods
- Developed plugins for admission control and activity monitoring

Philips Healthcare (https://www.usa.philips.com/healthcare) **(with CMU HCI)** *Feb. 2021 - May. 2021*

Software Engineer | Pittsburgh, PA

- Developed a multiplayer game in Unreal 4 that simulates demining in mine fields in real life.
- Built dedicated server and network communication scheme

Dow Inc. (https://www.dow.com/en-us) *May. 2019 - Aug. 2019*

Software Engineer Intern | Shanghai

- Developed the front-end service to help automate web configuring and deploying pipeline on Azure Devops using Angular and Node.js. Save developers about 4000 hours of application configuring and deploying time every year.
- In company Hackathon, lead a 5-member intern team to design a prototype for a HR management system

Kolachalama Laboratory (http://sites.bu.edu/vkola/research) *Jan. 2020 –Aug. 2020*

Machine Learning Research Intern | Boston, MA

- Developed a conditional-GAN (generative adversarial network) to augment MRI (magnetic resonance imaging) scans with features from PET (Positron emission tomography) scans

ACADEMIC PROJECTS

Build Virtual World. *Game Programmer, CMU ETC* *Fall 2020*

- Built 5 fast-prototyping Unity games through development and collaboration with artists and sound designers
- Developed networking system for a multiplayer VR game to synchronize positional data of each player through delayed RPC calls. Implemented Inverse Kinematics for characters' full body motion.
- Customized and improved source code of Unity's OpenCV plugin for better facial motion detection in game
- Developed player control and UI system with different unconventional inputs such as webcam+microphone (OpenCV unity and PitchDetector), remote phone control (Airconsole) and multiplayer VR system (with Photon)
- More details on each game (https://mincany.myportfolio.com)

Stanford Dog Image Classification *Software Engineer, CS520 Machine Learning* *Spring 2019*

- Designed a new method for fine-grained image classification that combines CNN with Gradient Weighted Class Activation Mapping to enhance the performace of VGG-16 on Stanford Dog Image classification

PERSONAL PROJECTS

Unreal 4 real-time combat game *Fall 2020*

- Developed a real-time combat game using C++ in a team of 6 (2 programmers, 2 artists and 2 designers)