

Danke (Douglas) Luo

Software Engineer – *Seeking a summer 2018 internship*

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EDUCATION

Carnegie Mellon University, School of Computer Science

Sep. 2017 – May. 2019

Master of Entertainment Technology

University of Electronic Science and Technology of China

Sep. 2004 – Jun. 2008

Bachelor of Software Engineering

SKILLS

Programming Java, C#, Python, Bash, ActionScript

Software & Platform Linux, AWS, Azure, GCP, Hadoop, MapReduce, Docker, Kubernetes, Perforce, Git

ACADEMIC PROJECTS

Frankenstein, VR Exhibit (CMU, PA) – *Software Engineer*

Jan. 2018 – present

- Collaborated in a team of 7, explored novel mechanics for storytelling in VR, using Oculus and C#
- Built a first-person experience and 4 interactive scenes as a part of an exhibition in CMU's campus
- Developed a tool in Unity to edit scene transitions, implemented object fading in and out by a custom shader, along with moving, rotating and scaling functionalities

Big Data Analysis with MapReduce (CMU, PA) – *Software Engineer*

Jan. 2018

- Course project of Cloud Computing (15-619)
- Completed sequential data analysis utilizing AWS EC2 service on a 500M text dataset
- Conducted parallel analysis on a 300G text dataset with AWS EMR Hadoop Streaming
- Refactored python code structure for sequential analysis, improved the runtime from 60s to 10s
- Implemented mapper and reducer with Java and executed MapReduce task with AWS services

Autoscaling & Container Cloud Service (CMU, PA) – *Software Engineer*

Jan. 2018 – Feb. 2018

- Implemented a load balancer with python for Microsoft Azure to handle 3000 RPS
- Implemented a load balancer with Java for AWS to handle 4000 RPS and implemented autoscaling strategies for AWS ELB and EC2 services to handle horizontal scaling automatically
- Deployed containerized web application for interpreting and running python programs to Azure and GCP clusters and managed automatic deployment of containers using Docker and Kubernetes

Building Virtual World (CMU, PA) – *Software Engineer*

Sep. 2017 – Dec. 2017

- Built innovative virtual worlds on brand new platforms every two weeks with a different team of 5
- Worked with various platforms like HTC Vive, Oculus Rift, Apple ARKit and Hololens

WORKING EXPERIENCE

37 Games, Front-end Software Engineer

Jun. 2016 – May. 2017

- Worked on a browser MMORPG title that will be released soon "Lineage II : Awaken"
- Implemented a UI system using object pools to reduce memory allocation and garbage collection
- Developed a UI editor and code generator for protocol deserialization to facilitate developing process
- Responsible for multiple key features like A*, socket network, PvP siege warfare, raid bosses

Kingnet Games, Front-end Software Engineer

Jan. 2012 – May. 2015

- Shipped 3 browser game titles "Shu Shan Legend", "Running Warrior" and "The Legend of City"
- Integrated Robotlegs as MVC framework, using Dependency Injection to achieve low coupling
- Analyzed fps and memory usage, pinpointed memory leak problems, split code execution to multiple frames to eliminate fps lagging
- In charge of fighting system, character animation, map layout, resource loading and management