## Wenjie YANG

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## **EDUCATION**

2017 - 2019 CARNEGIE MELLON UNIVERSITY Pittsburgh, PA, USA

M.S. in Information Technology

2013 - 2017 Shanghai Jiao Tong University Shanghai, CHINA

B.S. in Computer Science

EXPERIENCE

Shanghai, CHINA | Pygmal Technology 2017.2 - 2017.6

Software Development Engineer

Build a VR-based architecture editor and evaluate computer graphic algorithm behaviors on HTC

Vive/ Oculus Rift

Shanghai, CHINA | Yitu Technology 2016.11 - 2016.12

Software Development Engineer

Develop a message queue system based on Kafka for large scale face-recognition system.

Build a file system abstraction for all storage systems to reply on

Shenzhen, CHINA Tencent Technology 2016.7 - 2016.9

C++ Back-End Engineer

Build a large-scale digital distribution platform, especially focus on server of the social system.

Hong Kong, CHINA PRIME Lab 2016.2 - 2016.5

Research Assistant Director: Charles Zhang

Build a pointer analysis tool for C/C++ programs powered by LLVM;

Develop inter-function pointer analysis using Z3 solver.

**PROJECTS** 

2017.FEB - 2017.JUN | Hephaestus, a VR-based architecture editor

C++, DIRECTX11, COMPUTER GRAPHICS

Build a VR application for architecture exploring and editing

Evaluate computer graphics algorithms like Shadow Mapping, View frustum culling's behavior

2016.SEP - 2017.JAN | *TiKV database* 

RUST, OPEN SOURCE PROJECT

Improve the Raft Consensus algorithm for the distributed Key-Value database

Implement development tools for Multi-Version Concurrency Control(MVCC) Key-Value scanning.

2016.APR - 2016.SEP | Servo Browser Engine

RUST, OPEN SOURCE PROJECT

Improve the protocols used for Firefox developer tools, like redirecting requests.

Improve the tidy checker in style checkers for the project.

2016.JAN - 2016.FEB | *SimpleDB DBMS* 

Support for various query processing operators, as well as transactions, locking, and concurrent

queries.

2016.Jul - 2016.Aug | OAT Language Compiler

OCAML, INDIVIDUAL PROJECT

A Java-like language powered by LLVMLite IR, which is a subset of LLVM

Design a static analysis framework to support analysis and optimization.

2015.MAR - 2015.JUN | YOS Kernel from scratch

A tiny operating system kernel.

Experience with bare metal programming; Support preemptive scheduler with Round-Robin algo-

rithm; Create symmetirc multiprocessing system

**SKILLS**