JUNFENG SHE
Gameplay Programmer

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EXPERIENCE

Gameplay Programmer Intern, Tencent   05/2019-08/2019
- Developed art pipelines and automation rectification for assets.
- Scripted UI and VFX, implement Lua scripts for hot-fix.
- Optimized render and resource loading performance for mobile.

Software Engineer, Naturali   03/2015-03/2017
- Developed Tensorflow framework upgrades for speech-recognition.
- Integrated speech models in mobile applications
- Developed distributed backend server and data server.
- Implemented Web and mobile application crawlers.

Research Assistant, Peking University   09/2013-12/2014
- Researched and developed Android applications to collect information, foster user behaviors, improve mobile user's experience.
- Designed a scalable code solving the distance problem of QR code in a cooperative research program of Microsoft and Peking University. Related paper: "Strata: Layered Coding for Scalable Visual Communication," ACM MobiCom'14.

TEAM PROJECT

AchiTac, 3d exploration and building game
- Building system, anchoring the building position, connecting assets with building blocks.
- Inventory system, handling interaction between warehouse, factory, and player.
- Behavior AI for creatures and enemies.
- Visual effects implementation, like fog and cloud.

The Final Funktier, An alternative controller ryhthm game
- Timeline and camera management for spawning objects of music flow.
- Integrate and polish alternative controlles inputs.
- Tools devising/converting/saving rhythm levels.

PERSONAL PROJECT

Game Engine
- Platform independent render pipeline.
- Memory pools, allocators, and smart pointers.
- Event/Message System

Physical Simulation
- 2D&3D collision detection.
- GPU-based Fluid simulation.
- Voxel-based rigid body simulation.

Terrain Generation
- Mesh union and difference
- Edge and objects smooth algorithm

SKILL

Math
- Linear Algebra
- Graph Theory
- Discrete mathematics
- Game Theory

Languages
- C/C++/Golang
- HLSL/GLSL
- Python/Lua/Awk/Sed
- Bash/SQL

Software and Tools
- Unreal/Unity
- Photoshop/Maya
- Git/Perforce/Jira

EDUCATION

University of Utah, Salt Lake City   2018-Present
Master of Entertainment Arts and Engineering

Peking University, Beijing   2011-2015
Bachelor of Computer Science