Wenxuan Zhu

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Educational Backgrounds

- Wuhan University of Technology *Sept. 2012 – June 2016*
  - Major in Software Engineering: Overall GPA: 82.7/100, Junior year: 85.9/100
- North Carolina State University *Aug. 2016 – May 2018*
  - Master of Computer Science: Current Overall GPA: 3.58/4.0

Skills and Tool Experiences

- *Programming Languages:* Java, Python, C, C++, JavaScript, C#, Scheme
- *Frameworks/Tools Experiences:* Android, Git, Cocos2d, OpenCV, Unity, WebGL, Xcode, MYSQL

Internship/Work Experiences

- Intern, Software Developer, Biotique Systems, Inc. *July 2017 – present*
  supervised by John Burke
  - Constructed a solver for a TSP variant after research and implemented it in Swift
  - Worked with senior developer and designed test suite for the TSP solver API
  - Built Python programs that solve a regression problem using Tensorflow
  - Read htslib source code and wrote C program to extract and process data from .bam files
  - Wrote shell scripts and developed a complete solution combining the regression solver and .bam files processor
  - Trained and optimized haar cascade using OpenCV to solve a object recognition problem
- Intern, Android/Cocos Developer, 1-xing Co., Ltd. *Oct. 2014 – July 2016*
  - Led game project, Nano Trip, as the gameplay designer and developer with art&music designers
  - Worked on a project for Wuhan Metro Maintenance Department as Android developer
  - Worked on several game projects including an Android 2D-auto-scroller Fruit Run, a physics game Crazy bounce in Cocos2d-JS

Selected Projects

- Missile Command *Nov. 2017 – Dec. 2017*
  - Developed simplified version of the classic game in 3d with only WebGL
- Different Levels of Communication in Multi-Agent System *Jan. 2016 – Apr. 2017*
  - Implemented foraging problem model in Unity to study multi-agent AI strategies, coding was done in C#
  - Showed that the system benefits from higher quality of information sharing
- Sentiment Analysis and Prediction to News *Sept. 2016 – Dec. 2016*
  - Trained sentiment polarity classifier with mined data from Twitter, coding was done in Python with NLTK
  - Developed simple system to predict sentiment polarity from users given Reddit posts
- **Nano Trip: A Soft-body Physics Game** *July 2015 – May 2016*
  - A parkour physics game with procedurally terrain, where you control your character by creating objects in game world with gestures and affecting game world by tilting your device
  - Developed in C++ with Cocos2d-X and ported to both Android and iOS
  - Simulated soft body in rigid body physics engine
  - Won 2nd Prize of Meizu Flyme Android App Design Contest for college students(National) *Oct. 2015*
- Monopoly Game *Sep. 2015*
  - Worked as lead programmer, developed in C++ with Cocos2d-X, ported to both Android and iOS
- Space Invaders on Nu-LB-NUC140 Learning Board *Nov. 2014 – Jan. 2015*
  - Designed and implemented drivers for the board in C using provided Board Support Package(BSP)
  - Implemented the double-buffering technique to reduce flickering
- The Adventure in WUT *Dec. 2012 – Mar. 2013*
  - An interactive text adventure game built from scratch in C