

# Ms. Hu Xinjie

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## WORK EXPERIENCE

### Singapore ILM | Industrial Light & Magic (Technical Assistant) July 2017 – Now

- Provided technical support for VFX projects: Ready Player One, Avengers: Infinite War Part1, Monster Hunt2, Solo: A Star Wars Story
- Upgraded correlated python scripts of render data extraction and Grafana/Graphite graph generators
- Created script to automatically adjust resource allocation for Clarisse farm based on related configuration
- Maintained/updated in-house Python tools based on Linux environment per Jira tickets
- Provided daily support including: render debug/prioritize, data syncup/transfer/backup, archive/offline data

### Flying Chalks (UI/UX Design Intern) Aug 2016 – Nov 2016

- Designed advertisement posters of China main land and China Taiwan (displayed on personal web)
- Assisted in designing UI of web home page

### The Yangtze River Water Resource Commission Remote Sensing Laboratory Jun 2014 – Aug 2014

Project: The Dynamic Monitoring of Soil and Water Loss and Announcement RS Image Analyst

- Segmented and classified more than 4700 pattern spots through ArcGIS with accuracy over 83%
- Corrected 9 aerial photographic images and merged into 1 1:500 regional map
- Improved hands-on experience in ENVI Spatial Analysis Tool and capabilities in problem analyzing and solving

## EDUCATION

Nanyang Technological University, Singapore, (CGPA: 4.00 / 5.00) Jul 2016 – Jun 2017

Master of Science in Digital Media Technology

Specialization: Virtual Reality & 2D/3D Animation

Wuhan University, China, Second Upper Honors (CGPA: 3.42 / 4.00) Sep 2012 – Jun 2016

Bachelor of Science in Geographic Information System

Specialization: Computer Graphics & Digital Image Processing

## PROJECTS EXPERIENCE

### MAGIC Game Challenge 2016 (Team member of first prize winner) Aug 2016 – Nov 2016

<http://magic.ntu.edu.sg/news/1-latest-news/391-magic-game-challenge-2016>

- Collaborated with a team of 7, designed a 3D tower defense game based on Unity 3D engine
- Designed 5 main characters and 4 towers (Corel Painter), modeled 4 characters and 3 towers for 4 levels (Maya)
- Produced a 139-seconds trailer (YouTube Link) based on AE, increased visually appealing in final competition

### Advanced Computer Graphics (Curriculum) Oct 2016 – Nov 2016

- Developed a mesh viewing software based on C++ and OpenGL (adopted glui for UI design)
- Increased efficiency of render by adopting nested algorithm in the calculation of surface normals
- Succeeded in displaying arbitrary 3D models (around 30000 Vertex), realized 4 types of rendering

### 3D Modelling and Reconstruction (Curriculum) Sep 2016 – Oct 2016

- Designed a B-spline curve plotting software based on C and OpenGL
- Achieved both adaptive method and uniformed method in render process, and knot insertion function

### China National Scientific Research Project May 2014 – Jun 2016

Hyperspectral Image Classification using Sparse Representation in Face of the Small Sample Size Problem

- Co-operated with a team of 4, compared sparse representation method in data classification with SVM
- Reduced multi-dimensional data to 70% by merging spectral and spatial information
- Adopted Support Vector Machine in establishing overcomplete dictionaries

### DMSP/OLS data and Cellular Automata Research Mar 2015 – Jun 2015

- Analyzed DMSP/OLS nighttime light data of Hangzhou bay and extracted valid data
- Increasing prediction accuracy by applied Markov model into traditional CA and utilized CA-Markov model
- Produced CA Prediction of Construction Land of Hangzhou Bay from the year of 2018 to 2022

## ACHIEVEMENTS AND AWARDS

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First Prize Winner of MAGIC game Challenge	Aug – Nov 2016
Gold Medal for Badminton IGS Open Game	Nov 2016
The 2nd Prize of National Scholarship	Dec 2014, Dec 2015
Merit Student	Dec 2014
The Excellent Student Cadre of University	Sep 2013, Sep 2014
Top Performer in Physical Culture Festival	Apr 2014

## CO-CURRICULAR ACTIVITIES

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**AIESEC Volunteer (International Kindergartens Project)** Dec 2016 – Jan 2017

- Analyzed cultural exposure needs and constructed Chinese cultural lectures for 2 kindergartens
- Cooperated with other 2 volunteers, scheduled the strategies and contents of courses for every 2 weeks
- Delivered 4 themes lectures and activities for over 25 kindergarteners (divided in 4 groups) and 5 teachers

**Assistant Chairman of Student Union** Jun 2013 – May 2014

- Planned and organized a "Environment protection" theme event with over 350 participants
- Led Recreation departments team of 19, attained the 7th place of 33 schools in "GOLDEN AUTUMN" drama competition
- Led Sports departments team of 13, coordinated with another school and won the bid of holding Sport Carnival

**The Monitor of 2012 GIS class 2** Sep 2012 – May 2013

- Organized extracurricular lectures and activities for 37 students biweekly
- Collaborated with the other 9 monitors in planning and administering monthly school events
- Consolidated in-class relationship through organized semiannual group birthday parties

## SKILLS

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**Language:** Native in Mandarin; Proficient in English

**Programming:** Python, Linux Shell Scripting, C++, HTML,

**Software:** Unity 3D, CorelDRAWX4, Adobe Creative Suitcase (AE PR PS)

## CERTIFICATES

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National Computer Rank Examination (NCRE): C (Rank II)

Junior First Aider (Certificated by Red Cross Society of China)