HANFEI REN

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EDUCATION

Zhejiang University (ZJU)Hangzhou, ChinaB.Eng. in Digital Media Technologyexpected 07/2018B.Eng. in Industrial Designexpected 07/2018

GPA: 3.87/4.0, Ranking: 1/59

University of Illinois, Urbana-Champaign (UIUC)

Visiting Research Student (Advisor: Prof. Wai-tat Fu)

National University of Singapore (NUS)

Exchange Student (Advisor: Prof. Brian Y. Lim)

Urbana, IL, U.S.A.

07/2017-09/2017

Singapore

01/2017-05/2017

PEER REVIEWED PUBLICATION

Ziang Xiao, Helen C Wauck, Zeya Peng, <u>Hanfei Ren</u>, Lei Zhang, Shiliang Zuo, Yuqi Yao, Wai-tat Fu.
 2017. An Adaptive Educational Gaming Platform for Training Spatial Visualization Skills. Submitted to the 23Rd International Conference on Intelligent User Interfaces (IUI '18)

ONGOING PROJECTS

Capstone Project with Canon 11/2017-Present
Deep Learning Based Clothing Recommendation 10/2017-Present

FINISHED PROJECTS

Cubicle @ Department of Computer Science, UIUC, Advisor: Prof. Wai-tat Fu

07/2017-09/2017

- Engaged in developing *Cubicle*, an adaptive educational gaming platform with multiple game modules to effectively train students' spatial visualization skills.
- Designed, developed, and tested 3 out of 8 game modules to train different components of spatial visualization by Unity. These modules record players' in-game behavior with high granularity and provide automated, scalable feedback on players' problem-solving strategies.

Taste Healthy @ Department of Computer Science, NUS, Advisor: Prof. Brian Y. Lim 01/2017-05/2017

- Aimed at developing TasteHealthy, a mobile app for easy logging and recommendation of tasty and healthy food.
- Developed a RESTful API by Flask to evaluate users' health conditions, calculate target nutrient and retrieve food data; implemented an advanced function of nutrition value interval retrieve based on Nutritionix API in Singapore government food database.
- Gained practical experience in using food recognition and recommendation algorithms, such as Im2Calories, Yum-me and deep-based ingredient recognition for cooking recipe retrieval.

Locus Determination @ NUS, Advisor: Prof. Ng Teck Khim

03/2017-05/2017

- Conducted an independent course project with purpose of making use of GPS signals and phone accelerometers to derive a more accurate trajectory of the phone motion.
- Developed Android apps to record the GPS and accelerometer readings, compute the mean and variance of the records and determine the errors.
- Implemented Kalman filter manually based on the calculated errors to derive a more accurate phone motion from the GPS and accelerometer readings.

AI Report @ State Key Lab of CAD & CG, ZJU, Advisor: Prof. Hongxin Zhang 11/2016-03/2017

• Developed AI algorithms to generate journal reports on different areas semi-automatically for governmental decisions.

- Collected data from ACM news, Wired, LinkedIn and certain famous Wechat official accounts by Scrapy, and extracted topics by word frequency counting and natural language processing using LDA and word2vec algorithms.
- Visualized the collected data by Echarts, and made interactive heatmaps based on China and world maps to indicate the popularity of a certain topic in a region, along with hottest key words.

Selfie Camera and Visual Platform Design @ International Design Institute, ZJU 09/2016-04/2017

- Worked with Japanese designers from CASIO to develop a selfie camera and visual communication platform that will potentially become popular in the near future.
- Analyzed young people's favorite selfies to find that good photo composition and unconstrained shooting methods are of key importance.
- Designed a sphere panorama camera with certain attachments that could be remote controlled from smart phones as well as a visual communication platform based on a digital mirror with functions of shared diary between friends, lovers and relatives in different time zones.
- Drew product sketches using Sketch, made models using Rhinoceros and rendered final products using Keyshot.

VR Auction Platform Design @ International Design Institute, ZJU

11/2016-01/2017

- Participated in Alibaba user experience design workshop and designed a VR Auction Platform for lovers of anmie, comics and games to sell or exchange game equipment and related products.
- Designed an interactive function for the users to improve their product experience.

HONORS & AWARDS

•	First Prize of Research and Innovation Scholarship	2017
•	Top Ten Students of Yunfeng Campus (top 10/2000+)	2016
•	Second Prize of Excellent Undergraduate Scholarship (top 5/52)	2016
•	Nandu Scholarship	2016
•	Specialized Scholarship of Collective Duties	2016
•	Excellent All-round Student	2015, 2016
•	Excellent Student Cadre	2015, 2016
•	First Prize of Scholarship	2015
•	First Prize of Excellent Undergraduate Scholarship (top 21/721)	2015
•	Outstanding League Cadres	2015

EXTRACURRICULAR ACTIVITIES

Leader, Quality Development Center, Yunfeng Campus of ZJU

09/2015-06/2016

- Planned and organized ZJU Students' Festival parade activities for Yunfeng Campus part.
- Dealt with center's daily affairs of students' quality score, awards presentation and etc.

Key Member, Debate Team, College of Computer Science and Technology

09/2014-10/2015

• Participated in college debate competitions on behalf of college of computer science and technology.

Key Member, Public Relationship Department, ZJU Student Union

09/2014-06/2015

- Planned and organized C9 (9 top universities in China) student unions' forum.
- Negotiated with Alibaba for sponsorship on behalf of student union.

SKILLS

Programming: C/C++(OpenGL/OpenCV), Python(Pygame/OpenCV/Django/Flask), SQL, php, html5, CSS, JavaScript, Unity, UE4, Xcode, Qt, Matlab, Android Studio and etc.

Design: PhotoShop, Rhino, Keyshot, Maya, Arduino and etc.