# Xin-Li HOU

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#### EDUCATION

## School of Computer Science, Zhejiang University

Sep 2016- present

B.E. in Digital Media Technology, Overall GPA: 3.84/4.0 Rank: 7 / 60

## RESEARCH EXPERIENCES

### Football Formation Detection | Zhejiang University | Research Assistant

Apr 2018 - Feb 2019

Advisor: Yingcai Wu, Researcher at CAD&CG State Key Lab, Zhejiang University

- Researched several previous methods in the field of study.
- > Worked with professional players and coaches, responsible for the cleaning and preprocessing of data and labels.
- Mined patterns from the middle-layer parameters of neural network using PCA and different clustering methods.
- > Co-authored a paper based on temporal convolutional network that was submitted to ijcai 19.

### Visualization over Sports Data | Zhejiang University | Research Assistant

Mar 2018- Present

Advisor: Yingcai Wu, Researcher at CAD&CG State Key Lab, Zhejiang University

- Researched and implemented force-directed graph, Hierarchical Edge Bundling and Gearing.
- Launched a website(vis101) to demonstrate our work at <a href="https://www.zjudmt.club">www.zjudmt.club</a>.
- Fit a Logistic Regression Model from kdd17 based on sklearn and pandas for predicting pass success rate and menace, reaching accuracy of 88% and 96% respectively.
- > Implemented a Pattern Abstract Model from kdd18 from scratch for the recognition and extraction of spatial-temporal attack pattern.
- ▶ Led a team with four members and presented at group meetings.

## Visual Analytics of Football Video | Zhejiang University | Research Assistant

Apr 2018 - Present

Advisor: Yingcai Wu, Researcher at CAD&CG State Key Lab, Zhejiang University

- > Designed and implemented a visual analytic system for professional football players and analysts.
- > Worked with professional players and coaches, presented to officials of Chinese Football Association
- Responsible for implementing the Video Interface and player components.
- Led a team with four members and worked with graduate students in the lab.

#### COURSE PROJECTS

#### MiniSQL | Database System

May 2018 - Jul 2018

- Implemented a basic relational database system that reads SQL orders as input in C++.
- Responsible for implementing API and Record Manager.
- > Presented the algorithms and demos of the system.

### **SKILLS**

Programming Languages: C/C++, Python, Matlab, PHP, HTML/CSS, JavaScript, TensorFlow, sk-learn, pandas, D3.js

Softwares: Microsoft Office, Photoshop, Premier

Native in Chinese, proficient in English (TOEFL 110 (Reading 29, Listening 28, Speaking 25, Writing 28)).

GRE: Verbal-162 Quantitative-168 AW-3.5