

TIANXIAO (VICTORIA) HU

Phone: (1)510-365-9806 E-mail: hutianxiaohu@gmail.com

Homepage: <https://tianxiaohu.github.io>

LinkedIn: <https://www.linkedin.com/in/tianxiaohu>

EDUCATION

University of California, Berkeley

Master of Engineering in EECS Department

Track: **Data Science & Systems**, Advisor: *John Canny*

Aug 2018 - May 2019

Fudan University

Major in **Computer Science**, minor in **Economics**

Overall GPA: 3.57/4.0, Major GPA: 3.86/4.0, Ranking: 11/109

Sep 2014 - Jun 2018

SKILLS

Programming Languages

Proficient in Python/C++/HTML/CSS/JavaScript/ \LaTeX ,
Experienced in C/Java/R/Matlab

WORK EXPERIENCE

SenseTime

Research Intern

Jan 2018 - Jul 2018

Beijing, China

- Employed ORB-SLAM2 algorithm to videos of autonomous driving and developed several algorithms to recover real-world scale from monocular video sequences without using radar or speed data.
- Developed an web-based interactive visualization system for displaying SLAM map and other detected objects like vehicles and traffic lights in autonomous driving scenes using *d3.js* and *Semantic UI*.
- Cooperated in other projects such as tracking road signs and depth estimation. Improved model performance using the relationship of corresponding feature points of adjacent frames and 3D-location information extracted from SLAM algorithm.

SAP

Predictive Analytics Intern

Sep 2017 - Jan 2018

Shanghai, China

- Employed *ARMA* model to predict sales amount of LiNing Sports, reducing the error rate from 33% to 14%.
- Built a recommendation system based on *Apriori Algorithm* to recommend goods for duty-free shop customers.
- Performed predictive analysis on hotel management data and identified dominant variables on monthly income and energy cost by contrasting the parameter of *linear regression* and *what-if analysis*.

KN Capital

Strategy Developer Intern

Jul 2016 - Dec 2016

Shanghai, China

- Preprocessed, cleaned and visualized trading data of financial derivatives using *pandas* and *seaborn*.
- Developed a machine learning model based on *neural network* and *HMM* to predict the market movements of financial derivatives, which finally converted to a strategy put into real trading on China stock market.
- Researched papers on novel machine learning algorithms applied to financial derivatives and drafted a literature review.

RESEARCH EXPERIENCE

AntVis: A Web-based Visualization System on Ant Trajectory

Independent Researcher

Jul 2017 - Jan 2018

Advisor: Chaoli Wang, University of Notre Dame

- Developed an algorithm to cluster ant trajectories using *MCP distance* and *affinity propagation*.
- Extracted ants' behavior features such as speed and winding angle and analyzed the trends over time.
- Developed a visualization system including pseudo video and different views of ant trajectories using *d3.js*.
- Summarized research into a paper to be submitted to *Computers & Graphics*, as the first author.

Risk Evaluation on P2P Lending Platforms using Soft Information

Research Assistant

May 2016 - Dec 2017

Advisor: Yun Xiong, Fudan University

- Analyzed data of P2P lending platforms such as loan amount, lending rate and trading behavior of users; implemented data visualization using *matplotlib* and *seaborn*.
- Used soft information of users to establish a model that can find borrowers who are likely to unpay the loan. Paper published on *Annals of Data Science(AODS)*. <http://rdcu.be/GkQC>