

# WANG, YUKE

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Personal Website: <http://wangyuke.cn>

Santa Barbara, CA, USA

## EDUCATION

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University of California, Santa Barbara (UCSB)  
Ph.D. in Computer Science

Sep. 2018 – Sep. 2025

University of Electronic Science and Technology of China (UESTC)  
B.Eng in Software Engineering  
GPA: 3.93/4.00 or 90.20/100.00 (Major Ranking: 10/759)

Sep. 2014 – Jul. 2018

TOEFL: 107 = R 28+L 29+S 23+W 27

GRE: V 152+Q 170+AW 3.5

Skills: C++, Python, High-level Synthesis

## RESEARCH & PROJECTS

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Springboard: A Haptic Feedback System for Breadboards  
*Research Intern – Dartmouth College. U.S.A.*

Dec. 2017 – Mar. 2018

- The research project built a haptic feedback system for breadboards.
- I am responsible for building the virtual spring of the haptic feedback system, and the experiment platform.
- Paper of this project is now in submission at *SIGCHI'19*.

Parallelize an Unordered Depth-First Search for Garbage Collection  
*Research Intern – George Washington University. U.S.A.*

May. 2017 – Aug. 2017

- The research topic aimed to adapt a traditional graph traversal algorithm for building an efficient garbage collector.
- Proposed and implemented two unordered parallel DFS algorithms using **OpenMP**. One was based on **Master-Worker** model, the other employed **Divide-and-Conquer** paradigm.
- Simplified the code of **CSR**( **C**ompressed **S**pase **R**ow) Graph Format Converter by 2/5.
- Finished a 7-page research paper independently.

Analysis of Outpatient & Hospitalization Expenses

Jan. 2017 – Apr. 2017

*Research Assistant – Modern Service Computing Lab at UESTC*

- This project aimed at building a medical expense analysis system for validating patients' medical expenses and reducing manual efforts in identifying abnormal expenses.
- Finished feature selection through using **IV**( **I**nformation **V**alue) and **WOE**( **W**eight of **E**vidence) for features' importance analysis, **VIF**( **V**ariance **I**nflation **F**actor) for features' colinearity analysis.
- Completed **Logistic Regression** modeling, **Decision Tree** modeling and the model performance evaluation.
- Improved the accuracy of **Decision Tree** model from 70% to nearly 90%.
- Integrated the project introduction, descriptive statistics and prediction models into the expense analysis system.

Server Development for Online Shopping Website

Apr. 2016 – Jul. 2016

- Team leader of server application(based on **Tornado** web framework) development and optimization group.
- Enhanced the accuracy of keywords matching of the online search engine(based on **Whoosh**) and reduced the latency of response.
- Completed and optimized the business logic of commodities' information entering.

## Website's Data Analysis and Visualization

Jan. 2016 – Feb. 2016

- This project assisted merchants in targeted marketing, and improved website performance and user experience.
- Implemented a hotspot generator to display the geographical distribution of users and a line chart generator for monitoring weekly and daily website traffic.
- Improved the efficiency and accuracy of acquiring users' location information by integrating Baidu Map API.

## HONORS & AWARDS

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Outstanding Graduates Award of UESTC	Oct. 2017
First-class People's Scholarship (2/20 in the <b>Elite Program</b> )	Oct. 2017
Interdisciplinary Contest In Modeling (ICM) [ <b>Honorable Mention</b> ]	Apr. 2017
Suzhou Industrial Zone Scholarship (2/20 in the <b>Elite Program</b> )	Apr. 2017
International Software Testing Qualifications Board ( <b>Certified Tester</b> ) [Foundational Level]	Oct. 2016
First-class People's Scholarship (4/116)	Apr. 2016