

# YAO XIE

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## EDUCATION

- The University of California, Los Angeles (UCLA)**, Los Angeles, California, USA *Sep. 2017 - Present*  
*M.S. in Computer Science, GPA: 3.96/4.0, Grader of Fundamentals of Artificial Intelligence*
- Shanghai Jiao Tong University (SJTU)**, Shanghai, China *Sep. 2013 - Jun. 2017*  
*B.S. in Computer Science, GPA: 3.83/4.3, Teaching Assistant of Data Structure*

## TECHNICAL SKILLS

**Programming Languages:** C/C++, Python, C#, JAVA, SQL, PHP, HTML, MATLAB, L<sup>A</sup>T<sub>E</sub>X  
**Platforms:** Windows, Linux, Visual Studio, Android Studio

## INTERNSHIP

- Google, YouTube Infrastructure**, Mountain View, California, USA (C++) *Jun. 2018 - Sep. 2018*  
*Software Engineer Intern*
- Implemented auto cleanup for table creation/data registration failure in query engine Procella to improve usability.
  - Added the new feature of refreshing computed file sets for specified table with date partition to make YouTube data comply with General Data Protection Regulation (GDPR) (EU).
  - Implemented regression tests for separated MetaDataServer/RegistrationServer architecture in Procella.
  - Added GRANT/REVOKE access control support on Datascape table for Procella.
  - Introduced MFS file cache to reduce the overhead of creating MFS file for shuffle ops in simple queries (x1.2 speedup).
  - Added the new feature of enabling dynamic shuffle for GROUP BY queries followed by shuffle JOIN.
- Microsoft, APGC CSS**, Shanghai, China (C#, SQL) *Jun. 2016 - Sep. 2016*  
*Support Engineer Intern*
- Provided technical solutions to System Center Configuration Manager by debugging, log tracing, and error reproducing.
  - Wrote SQL queries to retrieve internal personnel information for technical reports.
  - Won 1<sup>st</sup> place (see Project Mr. Chorder) in Microsoft Young Hackathon at Shanghai site.

## PROJECTS

- IMDB Movie/Actor Database System (PHP, HTML, SQL)** *Apr. 2018 - May. 2018*
- Built a database system on movies/actors. Created a web interface for users to interact with MySQL database and used Bootstrap to design the web pages.
  - Built links between data, implemented a movie review system and search functionality.
- High-definition Video Wireless Transmission Optimization (C++, MATLAB, Python)** *Apr. 2017 - Jun. 2017*
- Developed an optimal relay location algorithm using Tensor Recovery in MATLAB for high-definition video wireless transmission where obstructions exist.
  - Implemented a three-end system on three laptops (sender, relay, receiver) using C++ and a Python-controlled Roomba iRobot for real-life application.
  - Achieved up to 5 times better performance in quality, stability, and demonstrated the ability to environment adjustment.
- Mr. Chorder, A Music File-to-Score Transformer (C#)** *Aug. 2016*
- Implemented the music score prediction module using C4.5 Decision Tree. Achieved an accuracy of up to 95% in recognizing scores with small training sets.
  - Implemented a PDF render library for automate music sheet generation using iTextSharp.
- Android Based Car Controlling (JAVA)** *Oct. 2015 - Dec. 2015*
- Developed an android application that could control the movement of a toy car through Bluetooth.
  - Implemented multiple controlling methods, such as voice recognition (using iFLYTEK Open Platform speech technology), screen gesture, gravity (using Gyro/Acceleration sensors).

## PUBLICATIONS

- Paper:** Yao Xie, Xiao-Yang Liu, Linghe Kong, Fan Wu, Guihai Chen, Athanasios V. Vasilakos, "Drone-Based Wireless Relay using Online Tensor Update", IEEE International Conference on Parallel and Distributed Systems (ICPADS), 2016.
- Patent:** Linghe Kong, Yao Xie, Fan Wu, Yifeng Cao, Xiao-Yang Liu, Guihai Chen, "Drone-Based Optimal Relay Locating Method and System", public, China, 2016.

## HONORS & AWARDS

- Excellent Graduate of SJTU *Jun. 2017*
- CCF Certified Software Professionals (Top 3.61%) *Sep. 2015*
- Meritorious Winner (acceptance 9%), Mathematical Contest in Modeling *Apr. 2015*
- Scholarship for Academic Excellence, SJTU *Nov. 2014, 2015, 2016*
- Arawana Scholarship (total 30 students at SJTU) *Nov. 2014*