

# Yao Zhongyu, Frank

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## Profile

- Strong passion in machine learning/data mining-related R&D with empirical experience
- Hands-on experience in C/C++, Java, Python programming and other system implementation
- Sound knowledge about data science, database, machine learning and so on
- Various international experiences and great command of written and spoken English with certifications
- Able to work under pressure with high independence. Open-minded, creative and eager for learning

## Education

<b>2021.09 - Present</b>	<b>City University of Hong Kong</b>	<b>Hong Kong SAR</b>
➤ Ph.D in Computer Science		
<b>2018.09 - 2020.03</b>	<b>The Hong Kong Polytechnic University</b>	<b>Hong Kong SAR</b>
➤ Master of Science in Information Technology		
➤ Graduated with Credit		
<b>2016.07 - 2016.09</b>	<b>University of California, Irvine</b>	<b>United States</b>
➤ Visiting International Program		
<b>2014.09 - 2018.06</b>	<b>Chongqing University of Posts and Telecommunications</b>	<b>Mainland China</b>
➤ Bachelor of Engineering in Information Security		
➤ Elite Class of Outstanding Engineers Program ( <a href="#">PETOE</a> )		
➤ Grade comprehensive ranking: 7/282		

## R&D Experience

### Research Papers

- The comprehensive and systematic identification of BLCA-specific SF-regulated, survival-related AS events. Gene, 2022 [\[DOI\]](#)
- Recursive Balanced k-Subset Sum Partition for Rule-constrained Resource Allocation. CIKM 2020 [\[DOI\]](#)
- IRDA: Incremental Reinforcement Learning for Dynamic Resource Allocation. IEEE Trans. Big Data, 2020 [\[DOI\]](#)
- BigARM: A Big-data-driven Airport Resource Management Engine and Application Tools. DASFAA 2020 [\[DOI\]](#)
- A Sequential Attention Based Convolutional Neural Network for Anomaly Detection. Journal of Zhengzhou University (Natural Science Edition), 2019(02) [\[DOI\]](#)

### Academic Services

- Referee for Submissions to Journals: Computer Communications, BioData Mining
- Reviewer for Submissions to Conferences: APBC 2022
- Research Committee Member: ISCM 2022 – ISCM 2024

### Competitions & Developments

- 2018.10-2019.06** EY Data Science Competition, “[Smart City](#)”, Ranked **top 10 in HK, 6.2%**(147/2369) **globally**
  - Predict the vehicle location in the city of Atlanta by using systematic data mining and processing ideas.
- 2017.09-2018.06** Tianchi Competition, “[Clothes Matching on Taobao](#)”, Ranked top **0.67%**(17/2523) **globally**
  - Analyze and model more than 1.837 million Taobao desensitization data by Java and Python. Thoughtful feature engineering is deployed.
  - In modelling part, multiple algorithms including XGboost, Ridge Regression, and KNN are partially combined.
- 2017.03-2017.06** **Team Leader**, National College Student “[Challenge Cup](#)” Contest, Ranked top **0.46%** **nationally**
  - The system is designed to target abnormal real-time or predicted flow distribution, giving rational advice to the airport and presenting users the flow inside the airport in different time.

- As the captain, I controlled the work progress, coordinated team members, and held monthly meetings with professors.

**2015.03-2016.08    Leader, The 6th “Huawei Cup” Chinese University Students Intelligence Design Competition**

- Read massive papers, selected algorithm, design models, and reconciled schedule among instructor and members
- Presented to judges and the final result was 2<sup>nd</sup> Prize at National-level

## **Work Experience**

**2023.03-2023.09    Faculty Lecturer,      Huaiyin Institute of Technology**

- Undertake the theoretical and practical teaching tasks of the specialty as well as other teaching tasks of CS
- Follow the latest research progress and participate in scientific research projects, publish scientific research papers and other scientific research tasks
- Participate in the construction of disciplines and professional construction tasks of the university

**2019.05-2021.02    Research Assistant,      The Hong Kong Polytechnic University**

- Develop and deploy a big data-driven system with state-of-art ML algorithms, i.e., reinforcement learning
- Design prototypes for performance evaluation of components and for big data programming models
- Conduct research works, including reviewing the literature, abstracting projects and writing papers

**2017.07-2017.09    Consulting Intern,      Deloitte**

- Familiar with the business and operation of EWM module in SAP system within one month
- Polish design logic of the new system and teach corporate customers to operate the system
- Received approval from the whole team and got a recommend letter from the project manager of Deloitte

**2018.07-2018.09    Director Assistant Intern,      Hangzhou Taihao Science&Technology Co.Ltd.**

- Negotiated with local government departments and overseas companies to promote business processes on a team basis
- Received foreign government commercial counsellors and assisted in hosting the first Hangzhou International Day
- Understood and participated in the company's operations, like administration, marketing and finance affairs

## **Extracurricular Experience**

**2019.02-2019.03    Volunteer, Innovating Hong Kong Global Talent Carnival**

- Invited international companies, top Chinese and local Hong Kong innovative companies to join the fair and guide

**2016.09-2017.07    Teacher Assistant, College of Computer Science and Technology**

- Administrated daily class work. Planned and organized activities between college and classes, such as promotion of exchange students program, friendship activities between classes (over 100 people), sports activities, etc.
- Tutored students English. Students examination scores improved a lot and most of them passed the CET4 after coach.

**2015.03-2016.03    Volunteer, English Corner in the University**

Organized oral communication between foreign teachers, Chinese and international students every week for 1 year

## **Skills**

- Programing: Python (PyTorch, Keras, Scikit-learn), C/C++, Java, Html 5, SQL
- Machine Learning: Data Modelling, Basic&Advanced Data Structure and Algorithm, Probability and Statistics Theory
- Language: English (IELTS, CET4/6), Mandarin (PSC secondary-level A), Cantonese (Beginner)

## **Awards&Certification**

**2023.10**    First Prize of HK Tech 300, 11th Cohort for “Touch AI”

**2023.10**    Innovative Applications of Digital Skills (Advanced) Certificate

**2020.09**    Candidate of Research Talent Hub (ITF-Funded 132K HKD) in Hong Kong

**2019.05**    (Global-level, 6.2%) Globe Award of EY NextWave Data Science Competition

**2018.05**    (National-level) Putonghua Proficiency Test (Secondary-Level A)

**2017.12**    (National-level, 0.06%) Gold Prize of "Internet Plus Express" Innovation and Entrepreneurship Contest

**2017.11**    (Provincial-level, 0.42%) Outstanding Prize of 3rd "Internet Plus" Innovation and Entrepreneurship Contest

**2017.07**    (National-level, 7%) 3<sup>rd</sup> Prize of National University Student Information Security Competition

**2017.07 (National-level, 10%)** 2<sup>nd</sup> Prize of The 15th National College Students' Challenge Cup  
**2016.12** (University-level, 7%) Outstanding Student Cadre  
**2016.12** (University-level, 2%) Advanced Individual of Innovation and Entrepreneurship  
**2016.08 (National-level, 15%)** 2<sup>nd</sup> Prize of The 6<sup>th</sup> “Huawei Cup” University Students Intelligence Design Competition  
**2016.05** (National-level, 3%) 3<sup>rd</sup> Prize of National English Competition for College Students-Class C  
**2015.12** (University-level, 6%) 2<sup>nd</sup> Class Scholarship  
**2015.06 (Provincial-level)** National Higher College Computer Rank Test Certificate Level-2  
**2014.05 (Provincial-level)** Merit Student of Jiangsu Province

## **Interests**

➤ Swimming, Skateboard, Martial Arts, Zen, Harmonica