# Yao Zhongyu, Frank

Tel: +852 59987778 / +86 18883944246

Email: Frank7.yao@connect.polyu.hk / Website: www.zhongyu.site

## **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

2021.09 - Present City University of Hong Kong Hong Kong SAR

> Ph.D in Computer Science

2018.09 - 2020.03 The Hong Kong Polytechnic University Hong Kong SAR

➤ Master of Science in Information Technology

➤ Graduated with Credit

2016.07 - 2016.09 University of California, Irvine United States

➤ Visiting International Program

2014.09 - 2018.06 Chongqing University of Posts and Telecommunications Mainland China

- ➤ Bachelor of Engineering in Information Security
- ➤ Elite Class of Outstanding Engineers Program (PETOE)
- ➤ 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: ISCMI 2022 ISCMI 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 <u>Team Leader</u>, National College Student "<u>Challenge Cup</u>" 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 Lecturer, Huaiyin Institute of Technology

- > Undertake the theoretical and practical teaching tasks of the specialty as well as other teaching tasks
- > 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%) 3rd Prize of National University Student Information Security Competition

- 2017.07 (National-level, 10%) 2nd 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