# YUCHENG WANG

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#### **EDUCATION**

# Joint Bachelor's Degree Program

Sept. 2019 - May 2024 (Expected)

# **Columbia University**

### New York, NY

- Bachelor of Arts in Computer Science, GPA: 4.18/4.00
- Relevant Coursework: System Programming, Computational Linear Algebra, Computer Science Theory, Artificial Intelligence, Machine Learning, Deep Learning, Computational Aspects of Robotics, Machine Learning with Applications in Finance, Computer Graphics

#### City University of Hong Kong

### Kowloon, Hong Kong

- Bachelor of Science in Computer Science, GPA: 4.01/4.30
- Relevant Coursework: Computer Programming, Calculus, Probability and Statistics, Discrete Mathematics, Computer Organization, Computer Networks, Data Structures, Operating Systems, Software Engineering, Database System, Design and Analysis of Algorithms, Multimodal Interface Design

# **WORK EXPERIENCE**

iFlytek

Suzhou, China

Jun. 2022 - Aug. 2022

- Machine Learning Engineer Intern, Computer Vision Group
- Collaborated in the development of a Parkinson's disease identification system using human pose estimation techniques.
- Engineered a pipeline to filter consistent human body keypoints from depth and RGB camera images, preparing data for semi-supervised learning and significantly reducing the workload of manual labeling.
- Independently developed a Human Keypoints Labeling software using PyQt, enhancing manual data annotation efficiency.

#### City University of Hong Kong

### Kowloon, Hong Kong

Apr. 2022 - Aug. 2022

**Teaching Assistant**, CS2204 Fundamentals of Internet Applications Development

- Prepared course materials on web front-end development, including lectures, tutorials, and demo code in HTML, CSS, and JavaScript.
- Designed student homework projects on focused on implementing a simple website for Hong Kong Disneyland with HTML, CSS, and JavaScript.

# Xi'anjiaotong University

# Suzhou, China

Jun. 2020 - Aug. 2020

- **Student Support and Operations Intern**, Suzhou Academy
- Provided academic consultation to parents and students, including study path advice and personalized study plans.
- Conducted tutoring sessions for enrolled students, reinforcing learning objectives and outcomes.
- Managed and maintained essential hardware devices, ensuring functional operation of the school's facilities.
- Created engaging marketing materials, including posters and videos using Adobe Suite, for school exhibitions and events.

### **RESEARCH EXPERIENCE**

# **City University of Hong Kong**

Kowloon, Hong Kong

Jun. 2021 - Apr. 2023

**Research on Human-Computer Interaction**, Supervisor: Dr. Zhicong LU, Assistant Professor at the Department of Computer Science, City University of Hong Kong

- Utilized sophisticated computational models to analyze user behavior patterns in online communities, uncovering insights into the relationship between real-life sports events and online discussions, contributing to online community design.
- Developed an innovative metric to measure the gap between pre-match expectations and actual match results, addressing the issue of low-scoring football matches not accurately reflecting fans' impressions, thereby quantifying previously elusive aspects of fan sentiment.
- Built a visualization system for a prototype online sports discussion forum, integrating findings from user behavior pattern analysis. Implemented using front-end JavaScript frameworks such as Bootstrap, Vue.js, and Chart.js.
- Published the paper based on the research result which is accepted by CHI'23: Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems: Yucheng Wang, Zhicong Lu. Making Sense of Post-match Fan Behaviors in the Online Football Communities. [https://doi.org/10.1145/3544548.3581310]

# CityU Shenzhen Research Institute

# Shenzhen, China

Aug. 2021 - Mar. 2022

**Research Assistant**, Supervisor: Dr. Zhenjiang LI, Associate Professor at the Department of Computer Science, City University of Hong Kong

- Collaborated on a research project focusing on deep neural network optimization for MCUs (Microcontroller unit), applying pointwise pruning techniques to convolutional neural networks.
- Conducted experiments on the research by coding and deploying TinyML applications on microcontrollers and mobile devices.

# **City University of Hong Kong**

# Kowloon, Hong Kong

Jun. 2020 - Jun. 2021

**Research Mentoring Scheme**, Supervisor: Dr. Jacky KEUNG, Associate Professor at Department of Computer Science, City University of Hong Kong

• Conducted research on predicting daily Hang Seng Index trends using deep learning algorithms for time series forecasting, focusing on LSTM and its various adaptations.

### **HONORS AND AWARDS**

- George B. Bernheim Scholarship for the 2023-2024 academic year Named scholarship awarded by Columbia University.
- Dean's list at Columbia University School of General Studies (Fall 2022, Spring 2023).
- Outstanding Academic Papers by Students at City University of Hong Kong 2022 Awarded recognition for my Final Year Project, "Online Community User Behavior Pattern Analysis," at City University of Hong Kong, 2022 (Granted to three students annually within the Department of Computer Science).
- Bronze Award in the Global AI Challenge for Building E&M Facilities 2021-2022 Proposed a solution based on gradient boosting decision tree algorithm for forecasting building cooling load.
- YEUNG Kin Man Scholarships for CityU-Columbia U Joint Bachelor's Degree Program 2021-22.
- Dean's list of College of Engineering at City University of Hong Kong (Spring 2020, Fall 2020, Spring 2021, Spring 2022).

### **MEMBERSHIPS**

- Member of the Honor Society of the Columbia School of General Studies.
- Member of the Columbia Chapter of Upsilon Pi Epsilon, the International Computer Science Honor Society.
- Member of The ACM Special Interest Group on Computer-Human Interaction (SIGCHI).
- Member of CityU Golden Key Club.

### **SKILLS AND INTERESTS**

- Programming languages: C/C++, Python, Java, SQL, HTML/CSS/JavaScript
- Tools and Frameworks: Git, Linux, Make, PyTorch, TensorFlow, LaTeX
- Languages: Chinese (Native), English (Proficient)
- Interests: Basketball (Member of Mainland Basketball Team of City University of Hong Kong), Music Production, Violin