Haozhou Xu

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EDUCATION University of Hong Kong Hong Kong Bachelor of Engineering (Major in Computer Science, Minor in Statistics) Sep 2020 – Jun 2024 ♦ CGPA: 3.75/4.30 (3.9 in CS major, 3.98 in Statistics minor) **University of Waterloo** Waterloo, Canada Exchange at Faculty of Mathematics Jan 2023 – Apr 2023 ♦ CGPA: 93/100 (A+) RESEARCH & WORK EXPERIENCE Computer Architecture & System Research Lab@HKU Hong Kong Research Assistant | Co-supervised by Prof. Eric Schuldenfrei and Prof. Hayden So Sep 2023 – Present ♦ Analyzed the Hong Kong COVID-19 outbreak building conditions and human mobility patterns. ♦ Constructed a sensor-based system that captures Bluetooth signals from devices, combined with fingerprints and machine-learning models to track human behavior patterns within buildings. Enhanced disease prevention strategies, enabling real-time monitoring and device clustering. **University of Hong Kong** Hong Kong Research Assistant | Supervised by Dr. Hengshuang Zhao Apr 2023 – Present ♦ Explored methods for enhancing 3D perception in various computer vision applications. ♦ Modified Open3D, CUDA libraries, and integrated DinoV2 for efficient 2D feature extraction. ♦ Evaluated by the ScanNet dataset, showcasing the benefits of specific features for 3D perception. AsiaInfo Technology Nanjing, China May 2022 – Aug 2022 Software Engineer & Analyst ♦ Developed and designed a customer information management system for a Fortune 500 company. ♦ Involved in Java web development, high-frequency handling and customer behaviour analysis. **COMPETITIONS & PROJECTS CASH Algo Trading Challenge 2023 (Global)** Hong Kong ♦ Performed auto-trading, analyzed financial data and combined R-Breaker with ML models. ♦ Conducted real-time simulations and optimization, won the 1st in competition. **Kaggle Competitions** UWaterloo & HKU ♦ Conducted statistical analysis, feature engineering, and machine learning implementations. ♦ Achieved 67/4821, 1/42 and 2/42 in House Price, ICU time and Mortality Rate Competitions. **Low-level image classification Project** HKU ♦ Investigated CNN components and variation models to enhance low-level image classification. HKU **Soccer Bot Project** ♦ Took on key responsibilities in Designing, programming, laser-cutting, and assembling the bot. ♦ Secured first place in the soccer competition and showcased the project. EXTRACURRICULAR ACTIVITIES HKU **Teaching Assistant** Hosted the tutorial sessions of the introductory programming course. Sep 2022 – Present Kunming, China **Library Volunteer** Participated in library book management activities Jul 2021 Best Strategy Design Award of Cash Algo Challenge 2023 2023 Rosita King Ho Scholarship 2023 **Dean's Honours List** 2021 **HKU Inno Show 2021** 2021 Outstanding Student Base School Scholarship of China Agricultural University 2020

PUBLICATIONS

PIBS: A Multi-modal Sensor Node for Pervasive Intelligent Building Sensing (IEEE submitted)

2024

♦ Computer: C/C++, Java, Python, NodeJS/React/XML, MySQL/OracleDB, Machine Learning tools. Wolfram, R, MATLAB, SolidWorks **♦ Others:**