Tianyuan(Alex) Du | Résumé

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Education

Bachelor of Science, Computer Science and Statistics (Double Majors)

University of Michigan, Ann Arbor   *2022/01 − 2024/05(expected)*

GPA: 3.80/4.00

Courses: Autonomous Robotics, Computer Vision, Data Mining, Human-Centric ML, Computer Organization, Data Structure, Combinatorics, Theoretical Statistics

Thesis: Predicting Song Popularity using Affective Programming. Extended version in submission to PerCom 2024.

Computer Engineering and Business Management (Dual Degree Program)

Hong Kong University of Science and Technology (HKUST)   *2020/09 − 2021/12*

Courses: Random Process, Signals and Systems, Multivariable Calculus, Matrix Algebra, Case Analysis

Experiences

Interactive Sensing & Computing Lab, University of Michigan, Ann Arbor, US

Research Assistant   *2022/05 − present*

Under guidance of Professor Alanson Sample and graduate student Yang-Hsi Su, worked on a novel system for indoor sensing with Bluetooth Low Energy antenna array. Conceptualized and implemented a custom two-dimensional Angle of Arrival measurement algorithm that improved prior work. Proposed and implemented a depth estimation pipeline based on machine learning, creating a 3-dimentional localization pipeline. Designed experiments to evaluate its performances. Submitted the work to IEEE WCNC 2024 as **first author**.

Hong Kong University of Science and Technology, Hong Kong S.A.R.

Undergraduate Research Opportunity (UROP)   *2021/09 − 2022/02*

Under guidance of Professor Kevin Chau from HKUST, worked on a paper for improving speech intelligibility of hearing aid devices. Conducted experiments to evaluate a novel method proposed in the paper.

Applied Sci & Tech Research Institute, Hong Kong S.A.R.

Engineer Intern   *2021/06 − 2021/08*

Worked in Communication Division of Network Software Group, focusing on automated-driving vehicles to develop a system that could assist vehicles to park automatically. Developed an end-to-end automatic camera calibration pipeline with a senior engineer. Highly recognized by the group management team, and the work was presented to the Hong Kong Government.

Awards

2022-2023: University Honor. Awarded by University of Michigan, Ann Arbor for academic excellence.

2021: Dean's List. Awarded by Hong Kong University of Science and Technology for academic excellence.

Skillset

Programming Languages: C++, C, Matlab, Python, Java, Javascript, R, SQL

Expertise: Wireless Systems, Maching Learning, Computer Vision, Signal Processing, Database Developement

Languages

Chinese(Native), English(Fluent)

Extracurriculars

University of Michigan Triathlon Club: Active member. Finisher of USAT Michigan State Championship and USA Collegiate National Championship.