Jiuhong Xiao

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Work Experience

Applied Scientist, Amazon, Arlington, VA
- Jan 2022 - Aug 2022
- Collaborated with cross-functional teams to improve Amazon Go/Just walk out (JWO) technology system performance
- Developed an occlusion detection system using Python, involving image database management and image processing techniques

Applied Scientist Intern, Amazon, Long Island City, NY
- May 2021 - Aug 2021
- Utilized Python to build an image compression system for Amazon Go/JWO technology system, which involved effective management of image databases

Product Intern, AbleCloud, Beijing
- Jun 2018 - Aug 2018
- Participated in developing a mobile APP for a smart lamp project, implementing a schedule and monitor functions by AbleCloud Platform
- Provided technical support for users and developers

Software Engineer Intern, Beijing Beike Xinxing Science and Technology Co. Ltd, Beijing, China
- Nov 2017 - Jan 2018
- Designed webpages and did database visualization with MySQL database and D3 tool

Software Engineer Intern, Rehabilitation Medical Technology Co. Ltd, Fuzhou, China
- Jun 2016 - Aug 2016
- Developed a nursing system for the aged with MySQL database
- Designed webpages to do data visualization

Education

Ph.D. in Electronic Engineering, New York University, New York, NY
- Sep 2022 - May 2027
- GPA: 4.0/4.0
- Relevant Course: Digital signal processing, Image and video processing

Master of Science in Computer Science, New York University, New York, NY
- Jan 2020 - Dec 2021
- GPA: 3.94/4.0
- Relevant Course: Programming language, Operation system, Fundamental algorithm

Bachelor of Engineering in Intelligence Science and Technology, University of Science and

Technology Beijing, Beijing, China
- Aug 2015 - Jun 2019
- GPA: 3.65/4.0
- Major GPA: 3.84/4.0
- Excellence Award for Undergraduate Thesis
- Relevant Course: Probability and mathematical statistics, Embedding system, Fundamentals of applied mechanics

Publications

Identity Preserving Loss for Learnt Image Compression, 2022
- Jiuhong Xiao, Lavisha Aggarwal, Prithviraj Banerjee, Manoj Aggarwal, Gerard Medioni,
- Computer Vision and Pattern Recognition (CVPR) Workshops (2022), 517-526.
- Programed with python for specific image compression system to improve efficiency and accuracy of image databases

Multi-Robot Collaborative Perception with Graph Neural Networks, 2022
- Yang Zhou, Jiuhong Xiao, Yue Zhou, Giuseppe Loianno
- IEEE Robotics and Automation Letters 7, no. 2 (2022), 2289-2296.
- Assisted to program with python for a message passing system

Toward Coordination Control of Multiple Fish-Like Robots: Real-Time Vision-Based Pose Estimation and Tracking via Deep Neural Networks, 2021
- Tianhao Zhang, Jiuhong Xiao, Liang Li, Chen Wang, Guangming Xie
- IEEE/CAA Journal of Automatica Sinica 8, no. 12 (2021), 1964-1976.
- Assisted to program with python for a message passing system

Image Encryption Algorithm Based on Memristive BAM Neural Networks, 2018
- Jiuhong Xiao, Weiping Wang, Meiqi Wang
- IEEE 3rd International Conference on Data Science in Cyberspace (2018), 205-212.
- Theoretically proved the effectiveness of an image encryption algorithm

The Stability of Memristive Multidirectional Associative Memory Neural Networks With Time-varying Delays in the Leakage Terms via Sampled-data Control, 2018
- Weiping Wang, Xin Yu, Xiong Luo, Long Wang, Lixiang Li, Juergen Kurths, Wenbing Zhao Jiuhong Xiao
- PLOS ONE 13, no. 9 (2018), e0204002.
- Assisted to program with Matlab for simulation

Travel History

Traveled to Hokkaido, Japan in February 2019.
Moved to New York, NY for study from January 2020 to now.