# HAOYANG CHEN

(614) 641-9258 | hchen046@usc.edu

## **EDUCATION**

University of Southern California

M.S. Computer Science

GPA 3.68/4.0

Los Angeles, CA 08/2020-present

The Ohio State University

B.S. Computer Science and Engineering
• Selected awards: DEAN LIST (AU16, SP17, AU19, SP20)

Columbus, OH 08/2016-05/2020

## COURSEWORK

Introduction to Robotics, Machine Learning, Foundations and Applications of Data Mining, Database System, Foundations of Artificial Intelligence, Analysis of Algorithms, Computer Animation

## TECHNICAL SKILLS

**Technical**: Python, C++, C#, R, HTML, SQL

Tools: ROS, Unity, Linux, Git, NumPy, Pandas, matplotlib, scikit-learn, PySpark, CLion, PyCharm, RStuido, Visual Studio Code

# **EXPERIENCE**

**Enhancing Neuro Imaging Genetics Through Meta Analysis (Prof. Yolanda Gil)** 

Research Assistant, University of Southern California

Los Angeles, CA

05/2021-present NeuroDISK

Created WINGS workflows and implemented neuroimaging meta-analysis methods

Did euroimaging data extraction and cleaning

Created the NeuroDISK website (https://knowledgecaptureanddiscovery.github.io/NeuroDISK/)

Predicting brain age using xgboost, svm and other regression algorithms

Scientific Discovery in Aging

Other Created WINGS workflows to analyzing correlation among genes, sleep and aging automatically 01/2021-04/2021

Analyzed Drosophila data using Python, Plink and GWAS scan

Adjusted p-values for SNPs and do visualization

Created the Aging website (https://sites.google.com/usc.edu/scientificdiscoveryinaging/home?authuser=3)

# Interactive and Collaborative Autonomous Robotics Lab (Prof. Stefanos Nikolaidis)

Research Assistant, University of Southern California

Los Angeles, CA 07/2021-11/2021

**Human Robot Collaboration** 

Created simulation environments for testing and did testing on real robots.

Did multi-agents task and motion planning
Trained neural network and GNN to make the planner learn from previous experience

Researched on how collaboration strategies can be helpful

The Ohio State University Columbus, OH 01/2020-05/2020 Grader, Department of Computer Science and Engineering

Grader of Computer Animation

Assisted to grade student's projects and assignments

#### Beijing GE Hualun Medical Equipment Company Limited Intern

Beijing, China 05/2017-07/2017

Labeled X-ray image for the machine learning research

Did data analysis on X-ray image data

Collected data for the Healthcare

# LEADERSHIP AND COMMUNITY ACTIVITIES

#### **DataFest Competition of The Ohio State University** Team Leader

Columbus, OH

Predicted an athlete's performance in future games by analyzing a large amount of the athletes' data

Made graphs for each subitem to get insights into their relationship with the athletes' daily load

Won the Best Visualization Award

# Dance of the Soul, Dance Illumination, Inc.

Dancer

Columbus, OH 10/2016 - 08/2019 11/2017 - 07/2018

Vice Chairman of Marketing

Gave dancing performance for the public on stage

Worked with dancers to plan out complex movements and steps on a stage during a show

Won the Award of Senior Dancer in December 2016