**CHENHAO LI**

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| **EDUCATION** | | | | | | | | | | |
| **ZJU-UIUC Institute** | 09/2019 ~ 06/2023 | | | | | | | | |
| B.S. in Electrical Engineering | Haining, China; Champaign, Illinois | | | | | | | | |
| * Zhejiang University | | | | | | GPA: 3.90 / 4.0 | | | | |
| * University of Illinois Urbana Champaign | | | | | | GPA: 3.77 / 4.0 | | | | |
| **Ranked 9/55** | | | | | |  | | | | |
| Sample Coursework and Grade: | | ECE120 Intro to Computing: A | | | | | | | | |
| ECE220 Computer System & Programming: B+ | | MATH213 Basic Discrete Mathematics: A+ | | | | | | | | |
| CS225 Data Structure: A | | ECE449 Machine Learning: In Progress | | | | | | | | |
| ECE110 Intro to Electronics: A | | ECE210 Analog Signal Processing: A+ | | | | | | | | |
| **HONORS** | | | | | | | | | | |
| ZJU 3rd Prize Scholarship | 06/2020; 06/2021 | | | | | | | | | |
| ZJU-UIUC Institute 3rd Prize Scholarship for Academic Excellence | | | | | | | 06/2020; 06/2021 | | | |
| ZJU-UIUC Institute Dean’s List | | | | | | 06/2020; 06/2020 | | | | |
| ZJU-UIUC Institute Academic Model Student | | | | | | 06/2020; 06/2020 | | | | |
| ZJU-UIUC Institute Innovation & Entrepreneurship Model Student | | | | | | 06/2021 | | | | |
| ZJU-UIUC Institute Community Service Model Student | | | | | | 06/2020 | | | | |
| Gold Award, Zhejiang Internet + Innovation and Entrepreneurship Competition | | | | | | | | | 08/2021 | |
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| **RESEARCH PROJECTS** | | | | | | | | | | |
| **Development of Tracking Algorithm under Mul-view** | | | | | 06/2021 ~ Present | | | | |
| Mentored by Gao’ang Wang, Prof. | | | | | Programmer | | | | |
| * Built a database for the data sets of visual key points information about the figures’ bodies, in videos taken from multiple views, applying open-source frameworks such as Detectron 2 (R101-FPN-3x). * Programmed the tracking values, and, with videopose3d, converted 2-dimensional information into 3-dimensional data. * Conducted regression analysis into the 2D and 3D key points as well as ground functions to determine the figures’ positions within the frame, fine-tuned with the videopose3d model that involved constraint to the movement detections of the ground and the figures. * Rotated and translated all 3D coordinate as a world coordinate with fixed ground points, tracked with the smallest distance in distance matrix. * Ranked within the top 3 out of 80 projects in the Zhejiang University Undergraduate Student Research & Innovation Initiative, a national-level program. | | | | | | | | | | |
| **Development of a D-HPC Supercomputing Platform** | | | 06/2021 ~ 08/2021 | | | | | | | | |
| Mentored by Tianyin Xu, Prof. | | | Programmer | | | | | | | | |
| * Proposed the project as a supercomputing network consisting of interconnected highly-functional computational nodes that offers powerful and flexible data processing for needs in governance, industry, academics, design, and various types of groups and individuals related to statistical analysis. * Programmed the block-chain-based and low-latency framework supporting the platform to outperform conventional cloud-computing solution providers in matters including but not limited to data storage, transmissions latency, computational power, and information security. * Compiled detailed business plans and hosted multiple roadshows to specify modes of the platform’s commercialized application. * Won the Provincial-level Gold Award at the 7th Zhejiang Province International “Internet +” College Student Innovation & Entrepreneurship Competition. | | | | | | | | | | |
| **Object Detection with Missing Labels** | 10/2021 ~ Present | | | | | | | | |
| Mentored by Gao’ang Wang, Prof., Zuozhu Liu, Prof. | | | | Programmer | | | | | | | |
| * Proposed the project as a tool that improve the performance with a missing label train dataset. * The imperfect bounding box annotations or missing annotations of objects in training images can have a drastic impact on its performance. * Use COCO dataset, evaluated with mAP, that included a training set for the algorithm that included 1,000 images with 30% of them missing labels, which was applied to a test set with 2,693 labeled images that achieved accuracies above 70% and growing. | | | | | | | | | | |
| **Y-Project** | 10/2020 ~ 10/2021 | | | | | | | | |
| Mentored by Yan Xiao, Prof., Yue Zhou, Prof. | Programmer | | | | | | | | |
| * Y-Project was initiated as an integrated design strategy for state-of-the-art technologies applied to develop an advanced prototype of an eco-friendly housing, able to demonstrate the highest achievable standards in architectural and environmental quality, energy efficiency, and economic viability. * Developed the prototype of a housing where, with computer vision technology, the intelligent system installed reacts with the habitants through projection technology that replaces screens, and offers them heads-up, hands-free and simple ways to engage digitally with the outside world through information exchange in augmented and extended dimensions via daily objects. * Accepted as one of the sponsored projects by Solar Decathlon China 2021. | | | | | | | | | | |
| **EXTRACURRICULAR PARTICIPATION** | | | | | | | | | | |
| **Zhejiang University Alumni Innovation & Entrepreneurship Competition** | | | | | | | | 12/2019 | | | | |
| Group Leader, Organizer Liaison Team | |  | | | | | | | | |
| **Zhejiang University RCDP and SQTP Programs** | | 03/2020 ~ 12/2020 | | | | | | | | | | |
| Project Initiator and Coordinator | |  | | | | | | | | |
| **SKILLS** | |  | | | | | | | | |
| Programming: Java Python C C++  Interests: Machine Learning, Software Development, Sytem and Network | | | | | | | | | | |