Cheng-Yen Chris Yang

Seeking 2021 Full-time Summer Internship in Applied Scientist (Computer Vision)

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Professional Skills

Languages Python, C++, PHP, Matlab
Frameworks Data(Hadoop, Spark), ML/DL(Pytorch), CV(OpenCV) , NLP(nltk, coreNLP)

Educations

University of Washington *Seattle, United States*
Ph.D. in Electrical and Computer Engineering *Sep. 2019 - present*
- Faculty Advisor: Professor Jenq-Neng Hwang

University of Washington *Seattle, United States*
M.S. in Electrical and Computer Engineering - GPA: 3.84 *Sep. 2019 - Jun. 2021*
- Selected Courseworks: Computer Vision, Deep Learning, Artificial Intelligence, Machine Learning for Big Data

National Taiwan University *Taipei, Taiwan*
B.S. in Electrical Engineering - GPA: 3.78 *Sep. 2014 - Jan. 2019*
- TA Experience: Machine Learning (Head TA), Deep Learning for Computer Vision
- 2018 The Presidential Award (Top 1% in Department of Electrical Engineering)

Research Experiences

Information Processing Lab, University of Washington *Aug. 2020 - present*
Research Assistant (Advisor: Prof. Jenq-Neng Hwang) *Seattle, United States*
- Developed an automated multi-view camera system for multi-person 3D pose estimation and tracking in adult day care services in cooperation with Quanta Research Institute using Pytorch for health monitoring and emergency detection.
- Implemented an LSTM temporal attention model and soft bio-metric re-ranking algorithm to achieve 50.3% accuracy on the CASIA-E dataset and ranked 5th for the 2020 ACCV HID challenge.

Vision and Learning Lab, National Taiwan University *Feb. 2017 - Feb. 2019*
Research Assistant (Advisor: Prof. Yu-Chiang Frank Wang) *Taipei, Taiwan*
- Designed and implemented a weakly-supervised learning method for attention-guided skull fracture classification with a 91% overall accuracy and +3% improvement on baseline models using Pytorch.
- Contributed to the intracranial hemorrhage detection AI system, partnering with deep01, and deployed in several Taiwan medical centers and hospitals for daily clinical prognosis.

Intern Experiences

Software Engineer Intern *Jun. 2020 - Sep. 2020*
ASML (Advanced Semiconductor Materials International) *San Diego, United States*
- Implemented performance analysis libraries for Nozzle Steering Module signals and measurements to simplify the verification processes using Python.
- Built and maintained over 2000+ lines code of internal testing python packages used by EUV machine source performance testing and analysis.

Publications

''Multi-modal Learning for Long-tailed Aerial View Object Classification'' , *Cheng-Yen Yang, Jiarui Cai, Hung-min Hsu, Jenq-Neng Hwang*, In submission to 2021 New Trends in Image Restoration and Enhancement workshop (CVPR 2021 Workshop).

''GaitTAG: Gait Recognition using Temporal Attention and Generative Keypoints Synethesis'' , *Hung-min Hsu, , Yizhou Wang, Cheng-Yen Yang, Jenq-Neng Hwang*, In submission to 2021 International Conference on Computer Vision(ICCV 2021).

''Weakly-Supervised Learning for Attention-Guided Skull Fracture Classification in Computed Tomography Imaging'' [link], *Cheng-Yen Yang, Chih-Hsin Lo, Huan-Chih Wang, Jen-Hai Chou, Yu-Chiang Frank Wang*, Accepted by 2019 IEEE International Conference of Image Processing (ICIP 2019).