# **Everley Tseng (Yu-Yun Tseng)**

Department of Computer Science, University of Colorado Boulder +1 (718) 406-3077

everleytseng0325@gmail.com

#### PERSONAL STATEMENT

My research interests are in artificial intelligence, computer vision, machine learning, natural language processing, data science and IoT. I have more than five years of researching and coding experiences in deep learning. My PhD research direction is focused on Image Segmentation, Few-Shot Learning, and Data Privacy. During my Master's program, I worked on deep learning applications in autonomous driving, indoor positioning and computer vision. Personal page

#### **EDUCATION**

#### PhD, Computer Science, University of Colorado Boulder

2021 - Present

- Research Assistant, Image & Video Computing Group (IVC) [website]
- Awarded Computer Science Departmental Fellowship \$4,000
- Awarded Clive Baillie Memorial Fellowship \$1,200
- Annual Graduate Students Award AY 2022-2023 (Research Award)
- Focus on Image Segmentation, Few-Shot Learning, Datasets, and Data Privacy
- Overall GPA: 3.85/4.0

# MS, Institute of Computational Intelligence, College of Artificial Intelligence, National Chiao Tung University

2019 - 2021

- Research Assistant, Pervasive Artificial Intelligence Research Labs (PAIR) [website]
- Teaching Assistant of Deep Learning course with lab lecturing
- Thesis: Low-Cost Computer Vision Intelligent Transportation Solutions in 5G
- Overall GPA: 4.15/4.3

#### BS, Department of Engineering and System Science, National Tsing Hua University

2013 - 2017

- · Program track: Electronic Engineering
- · Focused on embedded systems applications for medical use

#### Al Technical Professionals Program, Taiwan Al Academy (industrial scholarship)

2018

- Focused on programming skills in GAN, Attention, Segmentation, RL and LSTM.
- Won 2<sup>nd</sup> place award out of 23 teams in final project presentation
- Final project: Image Captioning Model with Individual Recognition

# **WORK EXPERIENCE**

#### **Computer Vision Engineer, Coretronic Corporation**

2017 - 2019

- Worked on computer vision and deep learning algorithms
- Developed CV and HCI projects on Linux, Windows and Android platforms

#### Research Intern, Lite-On Technology Corporation

2017

- · Worked on 3A algorithms (AE, AF and AWB), Image Signal Processing and Computer Vision
- Developed projects with C++, Linux, OpenCV and Caffe

#### **PUBLICATIONS**

### Disability-First Design and Creation of A Dataset with Private Visual Information [pdf, supplementary]

Tanusree Sharma, Abigale Stangl, Lotus Zhang, Yu-Yun Tseng, Inan Xu, Leah Findlater, Danna Gurari, Yang Wang Published in ACM Conference on Human Factors in Computing Systems (CHI), 2023

# VizWiz-FewShot: Locating Objects in Images Taken by People With Visual Impairments [pdf, supplementary]

Yu-Yun Tseng, Alexander Bell, Danna Gurari

Published in European Conference on Computer Vision (ECCV), 2022

#### Efficient Vehicle Counting Based on Time-Spatial Images by Neural Networks [pdf]

Yu-Yun Tseng, Tzu-Chien Hsu, Jen-Jee Chen, and Yu-Chee Tseng

Published in IEEE International Conference on Mobile Ad-Hoc and Smart Systems (MASS), 2021

## Computer Vision-Assisted Instant Alerts in 5G [pdf]

Yu-Yun Tseng, Po-Min Hsu, Jen-Jee Chen, and Yu-Chee Tseng

Published in IEEE International Conference on Computer Communications and Networks (ICCCN), 2020

## **COURSE PROJECTS**

## EmotionGIF Contest: Predicting a GIF Response for a Tweet [pdf]

Course project, Natural Language Processing, National Chiao Tung University, 2020

Solve Sudoku Puzzles Using Genetic Algorithm [pdf]

Course project, Evolutionary Computation, National Chiao Tung University, 2020

#### Multi-Headed Structure Cytopathic Effects (CPE) Few-Shot Classification

Academic project, Pervasive Artificial Intelligence Research Labs, National Chiao Tung University, 2020

## Tagging IoT Data on Drone View via Deep Learning

Academic project, Pervasive Artificial Intelligence Research Labs, National Chiao Tung University, 2019

Virtual Retail Clerk System with Image-Based and Textual-Description-Based Product Search

Industrial project, Coretronic Corporation, 2019

# Virtual Keyboard and Mouse by Gesture Control System with Computer Vision

Industrial project, Coretronic Corporation, 2018

#### Facial Skin Condition Analysis using Semantic Segmentation with Automatic Face Recognition

Industrial project, Coretronic Corporation, 2018

#### **Image Captioning Model with Individual Recognition**

Final project, AI Technical Professionals Program, 2018

#### Pain Rating System with Pain Level Inquiry Video in Emergency Room

Senior project, National Tsing Hua University, 2017

#### **Knee Supporting Level Analysis using Arduino**

Senior project, National Tsing Hua University, 2016