Jie(Jay) Mei

Department of Electrical & Computer Engineering University of Washington, Seattle, USA

Webpage: https://jay-ipl.github.io/| Email: jiemei@uw.edu

Education

University of Washington (UW)

Seattle, USA

Ph.D. in Electrical & Computer Engineering, Advisor: Prof. Jenq-Neng Hwang Sep 2019–Now

 Selected Courses: Deep Learning, Computer Vision, Statistical Learning, Natural Language Processing, AI for Engineers

Beijing Institute of Technology (BIT)

Beijing, China

B.Eng. in Electrical Information Engineering

Sep 2015 – Jun 2019

• Elite Class, Major: Signal and Image Processing (GPA: 92.10/100, Rank: 1/112)

University of California, Los Angeles (UCLA)

Los Angeles, USA

Visiting Research Student in Computer Science

Jul – Sep 2018

• Nationwide **10 percent** acceptance rate based on grades and research performance, Cross-disciplinary Scholars in Science and Technology Program (GPA: 4.00/4.00)

Hong Kong University of Science and Technology

Hong Kong, China

Exchange Student in Computer Science & Engineering

Jun - Aug 2017

• Courses: Introduction to Electro-Robot Design, Python (GPA: 4.3/4.3)

Publications & Preprints

- 1. **Jie Mei**, Jenq-Neng Hwang, "Video-based Self-Supervised 3D Shape Reconstruction" (In Progress)
- 2. **Jie Mei**, Jenq-Neng Hwang, Suzanne Romain, Craig Rose, Braden Moore, Kelsey Magrane, "Absolute 3D Pose Estimation and Length Measurement of Severely Deformed Fish from Monocular Videos in Longline Fishing," IEEE ICASSP 2021, Toronto, Ontario, Canada, June 2021 (PDF)
- 3. **Jie Mei**, Jenq-Neng Hwang, Suzanne Romain, Craig Rose, Braden Moore, Kelsey Magrane, "Video-based Hierarchical Species Classification for Longline Fishing Monitoring," the 4th Computer Vision for Automated Analysis of Underwater Imagery Workshop (CVAUI), ICPR 2020, Milan Italy, Jan. 2021 (PDF)

Research Experience

Computer Graphics & Vision Laboratory, UCLA

USA

Research Assistant, Advisor: Demetri Terzopoulos, Distinguished Professor

Jul – Oct 2018

An Auto-initialization Pipeline for Medical Image Segmentation with Active Contour Model

• Built a unified auto-initialization pipeline for three organs for active contour model (ACM). This pipeline eliminated the need for doctors to click on a medical image. As a result, ACM can do lesion segmentation automatically without human intervention.

Computer Vision Group, Tsinghua University

Beijing, China

Research Assistant, Advisor: Shengjin Wang, Professor

Sep 2017 – Nov 2018

Temporal Processing in Gait Recognition (State Key Development Program in 13th Five-Year)

• Improved the original model, 'deep recurrent convolutional networks for video-based person re-identification'. New model is more suitable for person re-identification in real-world crowded scenarios.

Working Experience

Image and Video Group, Megvii

Beijing, China

Research Intern, Advisor: Chi Zhang, Principal Scientist

Jun – Sep 2019

Task: Few-Shot Learning for Detection

Selected Awards and Honors

• Principal Xu-Teli Scholarship, BIT

2017

The highest honor in Beijing Institute of Technology. Only 9 students were awarded among all undergraduates based on research performance.

• National Scholarship, China

2016 & 2107

Top 1 in academic performance in School of Electronic Engineering in BIT.

• Second-Class Award in China, National College Students Physics Contest **Top 5** percent national wide.

2016

• First-Class Award in Beijing, National College Students Mathematical Modeling Contest2016 **Top 5** percent national wide.

Computer Skills

- Proficient in Python, Matlab, C++, C
- Skilled in deep learning framework: PyTorch, TensorFlow
- Online courses on Coursera platform:

Machine Learning, provided by Stanford University (score: 98/100)

Course certificate December 2, 2017 PDF

Deep Learning, provided by deeplearning.ai, given by Prof. Andrew Ng

Consisting of 5 interconnected modules: Convolutional Neural Networks (score: 100/100), Sequence Model (score: 100/100), Neural Networks and Deep Learning (score: 100/100), Structuring Machine Learning Projects (score: 96.7/100), Improving Deep Neural Networks (score: 100/100). Course certificate April 29, 2018 PDF

Social Activities

Pen Pal Program, UW

Sep – Dec 2019

Writing letter to local elementary students to inspire their willing to college.

• Class Representative, BIT

Oct 2016 - Jun 2019

Organized all class activities such as volunteer activities. My class was awarded one of two 'Outstanding Class' awards out of 45 classes in 2018 based on community involvement

Leader of International Volunteers. Sri Lanka

Jul - Aug 2016

Led eleven international volunteers to teach English in primary school and take care of endangered elephants in Sri Lanka including bathing them and preparing food.