

# Mengran Gou

☎ (+001) 617-583-2017 | ✉ mgou@ieee.org | <http://neu-gou.github.io>

## Education

### Northeastern University

PH.D IN ELECTRICAL ENGINEERING

Advisor: Octavia Camps

May. 2018

Boston, USA

### The Pennsylvanian State University

M.S IN ELECTRICAL ENGINEERING

Advisor: Constantino Lagoa

Aug. 2012

State College, USA

### Harbin Institute of Technology

B.E IN AUTOMATION

July. 2010

Harbin, China

## Expertises

**Problem** Human Analytics, Video Surveillance, Person Re-Identification, Time Series Analytics

**Algorithm** Metric Learning, Statistical Modeling, Deep Learning (classification and segmentation)

**Language** Python, C++, Caffe

## Research

### PERSON RE-IDENTIFICATION (RE-ID)

2013 - Present

- Delivered a real-time end-to-end re-id system in Cleveland Hopkins International Airport
- Developed novel features and metric learning methods to improve the state-of-the-art performance
- Proposed two largest realistic re-id datasets to facilitate the research in community.
- Built a systematic evaluation benchmark and maintained a website to collect most publicly available re-id datasets (43,000+ visits as of June 2018).

### MEDICAL VIDEO MOSAIC

2014 - 2017

- Collaborated with researchers and clinicians at Memorial Sloan Kettering Cancer Center to develop a robust and fast video mosaic method for reflectance confocal microscopy images.
- Delivered a fast video mosaic software to the hospital.

### SURVEILLANCE VIDEO ANALYTICS

2017 - Present

- Developed a robust object detector based on faster R-CNN

## Work Experience

### Siemens Healthcare Strategy & Innovation Center, Medical Imaging Technologies

Princeton, NJ

#### RESEARCH INTERNSHIP

May. 2017 - Sep. 2017

- Developing deep learning algorithm to solve fine-grained classification and semantic segmentation problems

### Qualcomm (Shanghai) Co., Ltd.

Shanghai, China

#### SENIOR ENGINEER

June 2018 - Present

- Developing computer vision demos and prototypes on mobile platforms.

## Publications

- **Mengran Gou**, Fei Xiong, Octavia Camps, Mario Sznaier. "MoNet: Moment Embedding Network", CVPR 2018
- **Mengran Gou\***, Srikrishna Karanam\*, Ziyang Wu, Angels Rates-Borras, Octavia Camps, Richard J. Radke. "A Comprehensive Evaluation and Benchmark for Person Re-Identification: Features, Metrics, and Datasets", IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI), in press

- **Mengran Gou**<sup>\*</sup>, Kivanc Kose<sup>\*</sup>, Oriol Yelamos, Miguel Cordova, Anthony Rossi, Eileen Flores, Kishwer Nehal, Octavia Camps, Jennifer Dy, Dana Brooks, Milind Rajadhyaksha. "Automated video-mosaicking approach for confocal microscopic imaging in-vivo: an approach to address challenges in imaging living tissue and extend field-of-view", Scientific Reports
- **Mengran Gou**, Octavia Camps, Mario Sznaiier. "moM: Mean of Moment Feature for Person Re-identification", ICCV Workshop 2017
- **Mengran Gou**, Srikrishna Karanam, Wenqian Liu, Octavia Camps, Richard J. Radke. "DukeMTMC4ReID: A Large-Scale Multi-Camera Person Re-Identification Dataset", CVPR Workshop 2017
- Kivanc Kose, **Mengran Gou**, Oriol Yelamos, Miguel Cordova, Anthony Rossi, Kishwer Nehal, Octavia Camps, Jennifer Dy, Dana Brooks, and Milind Rajadhyaksha. "Video-mosaicking of in vivo reflectance confocal microscopy images for noninvasive examination of skin lesion (Conference Presentation)." In Photonics in Dermatology and Plastic Surgery, vol. 37. 2017.
- Octavia Camps, **Mengran Gou**, Tom Hebble, Srikrishna Karanam, Oliver Lehmann, Yang Li, Richard J. Radke, Ziyang Wu, Fei Xiong. "From the Lab to the Real World: Re-Identification in an Airport Camera Network", IEEE Transactions on Circuits and Systems for Video Technology, 2016
- **Mengran Gou**, Xikang Zhang, Angels Rates-Borras, Sadjad Asghari-Esfeden, Mario Sznaiier, Octavia Camps. "Person Re-identification in Appearance Impaired Scenarios", BMVC 2016
- Xikang Zhang, Yin Wang, **Mengran Gou**, Mario Sznaiier, Octavia Camps. "Efficient Temporal Sequence Comparison and Classification using Gram Matrix Embeddings On a Riemannian Manifold", CVPR 2016
- Kivanc Kose, **Mengran Gou**, Christi Alessi-Fox, Jennifer Dy, Octavia Camps, Dana Brooks, Milind Rajadhyaksha. "Analysis of in-vivo Reflectance Confocal Microscopy Images of Skin", 2015 IEEE International Symposium on Biomedical Imaging
- Fei Xiong, **Mengran Gou**, Octavia Camps, Mario Sznaiier. "Person Re-Identification using Kernel-based Metric Learning Methods", ECCV 2014 [Cited by 265 *times* as of Nov. 2017]

<sup>\*</sup> indicates equal contribution

## Services

---

**Reviewer** TPAMI, CVIU, JVCI, IEEE Access, SIVT, ICDSC  
**Committee** Northeastern ECE PhD Student Seminar Series