MINGXI LEI

CONTACT INFORMATION

Los Angeles, CA
90007

mingxile@usc.edu
eemingxilei@gmail.com

FORMER RESEARCH AREA

- Sparse Representation, Compressive Sensing
- Quantitative Imaging
- Machine Learning

EDUCATION

Los Angeles, CA
Jan. 2019 - Expected 2020

University of Southern California
Master of Science (M.S.) in Electrical Engineering

- Concentration: Data Science and Engineering
- Cumulative GPA: 4.0/4.0
- Coursework:

Engineering Math	EE503	EE510
Machine Learning	EE559	EE660
Optimization	EE588	

Guangzhou, China
Sept. 2014 – Jun. 2018

Guangdong University of Technology
Bachelor of Engineering (B.Eng.) in Information Engineering

- Concentration: Signal and Image Processing
- Cumulative GPA: 85/100
- Award: Scholarship for Outstanding Students, Third Prize
- Final Project (Defense): Fast Sparse ECG-Signal Estimation based on $\ell 1$-homotopy (Advisor: *Prof. Jun Zhang*)

Taichung, Taiwan
Sept. 2015 – Jan. 2016

Chaoyang University of Technology
Exchange Student, College of Informatics

- Full Scholarship

RESEARCH EXPERIENCE

Los Angeles, CA
Jun. 2019 - Present

USC Radiomics Lab, Keck Medicine of USC
Summer Research Assistant
Advisor: Prof. Bino A. Varghese, Prof. Darryl H. Hwang

- Project: Radiomics Software Reliability and USC Radiomics Pipeline Benchmarking

Guangzhou, China
Jun. 2019 – Dec. 2018

Sun Yat-sen University Cancer Center
Student Research Affiliate, Department of Radiology
Advisor: Dr. Shuoyu Xu, Principal Investigator

- Project: Quantitative MR Image Analysis Predicts Tumor Regression Grade (TRG) of Colorectal Cancer

Guangzhou, China
Dec. 2017 – May 2018

Bio-Totem Tech
Research Intern
Mentor: Dr. Shuoyu Xu, Principal Investigator

- Responsibility: Quantitative Image Analysis, In-house Machine Learning Platform Development

CONFERENCE

1. *M Rivas, et al., M Lei.*
   Morphometric Image Analysis Predicts Surgical Outcomes During Level II-IV Level Inferior Vena Cava Tumor Thrombectomy.
   Paper to be presented at: Radiological Society of North America (RSNA) 2019, Chicago, IL.

2. *M Chang, et al., M Lei.*
   Feasibility of Nakagami Parametric Imaging for Texture Analysis of Ultrasound Images.
   Poster to be presented at: Radiological Society of North America (RSNA) 2019, Chicago, IL.

ACADEMIC STUDENT EMPLOYMENT

Fall 2019

Grader
Ming Hsieh Department of Electrical and Computer Engineering, USC

- EE141 (Applied Linear Algebra for Engineering)
- Instructor: *Prof. Antonio Ortega*

PROFESSIANAL SKILLS

Programming Languages: Python, MATLAB, R, C++
Tools, Platforms, Frameworks: scikit-learn, OpenCV, ITK, pandas, (py)radiomics, glmnet, caret

ADDITIONAL INFORMATION

Natural Languages: English (fluent), Cantonese (native), Mandarin (native)