

# PENGYU YAN

Tel: (+86) 13408531552; E-mail: py.yan965@gmail.com

## EDUCATION HISTORY

**University of Electronic Science and Technology of China, UESTC**

*Sept 2014-Jul 2018*

Major: Electronic Science and Technology

GPA: 3.65/4.0 (84.6/100)

Core-courses GPA: 4.0/4.0 (89/100)

TOEFL: 99 (R27 L24 S23 W25)

GRE: 319 (V149+Q170+3.5)

**Rutgers University**, New Jersey, summer Program

*July 2015-Aug 2015*

3D Printing, Package Engineering

Language program, PALS

## RESEARCH EXPERIENCES

**Research Projects (Prof. Ping Zhang)**

*July 2016-Present*

- Saliency Detection in 3D video based on Graphical Model
  - Designed a Multi-Scale architecture and upgraded SLIC algorithm
  - Exploited graphical model to refine the saliency maps
  - Adopted the guided filter to make the saliency map smoother
  - Submitted the paper to ICME2018
- Infrared Weak Target Detection based on Deep Learning
  - Used Convolutional Neural Network to process the feature of weak target
  - Edge box, region proposal method was adopted to help us recognize and classify target
  - A patent has been submitted in CN Patent office

**Mathematical Competition (selected) (Prof. Mingqi Li)**

*Oct 2015-Jun 2016*

- Optimization Model of Design for Mooring Chain System
  - Analyzed the force situation of Chain and built the equilibrium force equations
  - Used Simulated Annealing algorithm and multi-object optimization to design the chain system
  - Won the 1<sup>st</sup> prize in CUMCM (national) and published a journal article
- Devices function examination based on Multi-target optimization
  - Defined the quality degree of devices and pre-process the large data of them
  - Ranked each kinds of devices based on Grey Relational Analysis
  - Won the 2<sup>nd</sup> prize in UESTC MCM

## PUBLICATIONS & PATENTS

1. P. Zhang, **P. Yan**, J. Wu. Unsupervised Saliency Detection based on Multi-Scale Architecture and Graphical Model. *ICME*, Nov, 2018 (Submitted to *ICME2018*).
2. P. Zhang, J. Wang, **P. Yan**. An infrared weak target detection based on CNN. CN Patent office, App. Number: 201710758679.4.
3. **P. Yan**, C. Fan, F. Sun. Optimization Model of Design for Mooring Chain System. *Tianfu mathematics*, 2017, (23):63-66 (in Chineses).

## AWARDS

1 <sup>st</sup> Prize (Top 5%)	“Langchao” Enterprise scholarship (Only granted for two students)	Oct 2017
1 <sup>st</sup> Prize	Contemporary Mathematical Contest in Modeling	Sept 2016
2 <sup>nd</sup> Prize	2016 UESTC Mathematical Contest in Modeling	Jul 2016
Excellent Individual	PALS, Packaging Engineering, Rutgers	Oct 2015
1 <sup>st</sup> prize	The Third National Spoken English Competition (NSEC)	Nov 2014

## ACTIVITIES

**Freshman Mentor**, School of Optoelectronic Information

*Sept 2015-Jul 2016*

**Minister** of Public Relations Department, School Student Union

*Apr 2015-Jul 2016*

**Representative** of the Party Branch in UESTC

*Apr 2015-Jun 2015*

**Class Monitor**

*Sept 2014-Jul 2015*