PENGYU YAN

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University of Electronic Science and Technology of China, UESTC

Sept 2014- Jul 2018

Major: Electronic Science and Technology

GPA: 3.65/4.0

Core-course GPA: 4.0/4.0

TOEFL: 99 (R27 L24 S23 W25)

GRE: V149+Q170+3.0

Major courses: Calculus (82/100); Linear Algebra and Space Analytic (80/100); Signal and Systems (85/100); Advanced Programming Language (86/100); Optoelectronic Image Processing (85/100); Thin Film Technology (91/100); Sensing Technology (97/100); Opto-electronic materials and Devices (90/100); Application and Design of Digital Logic (85/100); Physical Optics (89/100)

Rutgers University, New Jersey, summer Program

July 2015-Aug 2015

3D Printing, Package Engineering Language program, PALS

RESEARCH

Research Projects (Prof. Ping Zhang)

July 2016-Present

- Graduation Thesis
 - > 3D Video Saliency based on Generative Adversarial Networks (GANs)
- Saliency Detection in 3D video based on Graphical Model
 - > Upgraded SLIC algorithm and designed a Multi-Scale architecture
 - > Calculated the saliency score based on global contrast
 - > Exploited transition probability in graphical model to refine the saliency maps
 - Submitted the paper to ICME2018
- Infrared Weak Target Detection based on Deep Learning
 - > Used Convolutional Neural Network to process the feature of weak target
 - > A patent has been accepted 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 build the equilibrium force equations
 - > Used Simulated Annealing algorithm and multi-object optimization to design the chain system
 - ➤ Won the 1st prize in CUMCM (national) and published a journal article
- Devices function examination based on Multi-target optimization
 - Definited 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 2nd prize in UESTC MCM

Package Engineering in Rutgers (Prof. Euihark Lee)

July 2015-Aug 2015

- 3D Printing
 - ➤ Built 3D models by Solidworks
 - ➤ Printed a mini F22 jet model by 3D printer

U STC 450

PUBLICATION & PATENTS

- 1. P. Zhang*, <u>P. Yan</u>, J. Wu. Unsupervised Saliency Detection based on Multi-Scale Architecture and Graphical Model. *ICME*, Nov, 2018 (Rejected for no comparison with deep learning, prepared to submit to a IEEE. journal).
- 2. P. Zhang, J. Wang, <u>P. Yan</u>, X. Wang, J. Liu. An infrared weak target detection based on CNN. CN Patent office, App. Number: 201710758679.4.
- 3. P. Zhang, M. Tian, X. Wang, <u>P. Yan</u>, J. Wu. Moving Object Detection Based on Infrared and Visible Video Fusion. CN Patent office, App. Number: 201710516316.1.
- 4. **P. Yan**, C. Fan, F. Sun. Optimization Model of Design for Mooring Chain System. *Tianfu mathematics*, 2017, (23):63-66 (in Chineses).

CONFERENCES

Vision And Learning SEminar 2017 Academic Conference (VALSE)

Mar 2017

2016 Chinese Conference on Pattern Recognition, CCPR

Oct 2016

AWARDS

Scholar

1st Prize	Contemporary Mathematical Contest in Modeling	Sept 2016
2 nd Prize	2016 UESTC Mathematical Contest in Modeling	Jul 2016
1 ST prize	The Third National Spoken English Competition (NSEC)	Nov 2014
1st Prize (Top 5%)	"Langchao" Enterprise scholarship (Only granted for two students)	Oct 2017
3 rd Prize (Top 15%)	People's Scholarship	Dec 2015

• Extra-Curriculum

Excellent Leadership	Minister of Public Relations Department in Student Union	Oct 2017
Excellent Organization	None-native Karaoka Game	Dec 2015
Excellent Individual	Summer Social Practice, UESTC	Oct 2015
Best	Volunteer of Robomaster Competition in 2016	

ACTIVITIES

Freshman Mentor, School of Optoelectronic Information

The class I have mentored ranked 1st in the school

Promoted a good academic and friendly environment

Minister of Public Relations Department, School Student Union

Apr 2015- Jul 2016

Sept 2015- Jul 2016

- Managed a group made up by 15 members
- Organized the None-native Karaoke game in our campus
- Win patron of 10,000RMB totally from the company as funding to support activities in school

Representative of the Party Branch in UESTC

Apr 2015- Jun 2015

> Organized three volunteer activities in the rounding community

Class Monitor Sept 2014- Jul 2015

➤ 1-year duration

SKILLS

Programing: Python, C++, HTML

Software: Ubuntu, LaTeX, Caffe, Matlab

Language: English (fluent), Chinese (native speaker)

Instruments: Bamboo Flute instruments (Amateur Level Ten, highest)