### Weihao YU

http://whyu.me

whyu@whyu.me

yuwh6@mail2.sysu.edu.cn



### **Education**

Master of Engineering in Software Engineering, Sept 2017 – June 2019 (expected)

Advisor: Prof. Liang Lin GPA: 3.80 / 5 (88.0 / 100)

Sun Yat-sen University (national key university of Project 985 and Project 211 in China)

Bachelor of Science in Opto-Electronic Information Science and Engineering, Sept 2013 – June 2017

(Optics and Physics are national key disciplines.)

Advisor: Prof. Dongmei Deng

GPA: 4.08 / 5 (90.8 / 100), Ranking: 1 / 82 (in major class), 1 / 189 (in similar major classes)

**South China Normal University** (national key university of Project 211 in China)

### **Awards**

- [1] National Scholarship (top 0.5%), Ministry of Education, 2015
- [2] National Encouragement Scholarship, Ministry of Education, 2014, 2016
- [3] First Prize Scholarship (top 2%), South China Normal University, 2013-2017 (Received for 4 consecutive years)
- [4] Scholarship of China Telecom, All-China Students' Federation & China Telecom, 2016 (1 among of 25000, I was the only student wining the scholarship at our university in that year)
- [5] The Special Prize Innovation Award, South China Normal University, 2017
- [6] Star of Optoelectronics, School of Information and Optoelectronic Science and Engineering, South China Normal University, 2016

### **Publications**

Google Scholar: <a href="https://scholar.google.com/citations?user=LYxjt1QAAAAJ">https://scholar.google.com/citations?user=LYxjt1QAAAAJ</a>

#### **Conference Papers**

Currently my interests are computer vision and machine learning.

- [1] co-first-authored manuscript was submitted to CVPR'19. (Due to the requirement of anonymous review, the title is not shown in public. I was responsible for the work of reading related papers, reproducing the previous models, designing our models, programing all code, doing almost experiments and revising our manuscript. We plan to release our trained models and code.)
- [2] Zhouxia Wang, Tianshui Chen, Jimmy Ren, Weihao Yu, Hui Cheng, and Liang Lin, "Deep Reasoning with Knowledge Graph for Social Relationship Understanding", Proc. of International Joint Conference on Artificial Intelligence (IJCAI), 2018.1

### **Journal Papers**

There are 5 SCI Journal papers of Optics and Physics, all IF>1.3. When I was an undergraduate student, my research interests were **Optics and Physics**. I was a reviewer of Appl. Optics (IF=1.791).

- [1] Weihao Yu, Ruihuang Zhao, Fu Deng, Jiayao Huang, Chidao Chen, Xiangbo Yang, Yanping Zhao, and Dongmei Deng, "Propagation of Airy Gaussian vortex beams in uniaxial crystals", Chin. Phys. B, 2016. (IF=1.321)
- [2] Fu Deng, Weihao Yu, and Dongmei Deng, "Controllably accelerating and decelerating Airy-Bessel-Gaussian wave packets", Laser Phys. Lett., 2016. 3 (IF=2.240)

<sup>&</sup>lt;sup>1</sup> IJCAI 2018 <a href="https://www.ijcai.org/proceedings/2018/142">https://www.ijcai.org/proceedings/2018/142</a>

Chin. Phys. B http://iopscience.iop.org/article/10.1088/1674-1056/25/4/044201/meta
 Laser Phys. Lett. http://iopscience.iop.org/article/10.1088/1612-2011/13/11/116202/meta

- [3] Fu Deng, **Weihao Yu**, Jiayao Huang, Ruihuang Zhao, Jiong Lin, and Dongmei Deng, "Propagation of Airy-Gaussian beams in a chiral medium", Eur. Phys. J. D, 2016. <sup>4</sup> (IF=1.393)
- [4] Ruihuang Zhao, Fu Deng, **Weihao Yu**, Jiayao Huang, and Dongmei Deng, "Propagation properties of Airy–Gaussian vortex beams through the gradient-index medium", J. Opt. Soc. Am. A, 2016. <sup>5</sup> (IF=1.556)
- [5] Jiayao Huang, Zijie Liang, Fu Deng, **Weihao Yu**, Ruihuang Zhao, Bo Chen, Xiangbo Yang, and Dongmei Deng, "Propagation properties of right-hand circularly polarized Airy–Gaussian beams through slabs of right-handed materials and left-handed materials", J. Opt. Soc. Am. A, 2016. <sup>6</sup> (IF=1.556)

#### **Patents**

- [1] **Weihao Yu**, Jiayao Huang, Ruihuang Zhao, Weijiang Yu, Yuanghao Huang, Zhihang Wu, Zhiqiang Liao, and Fu Deng, "Photoelectricity Touch Devices", CN204731762U
- [2] Liang Lin and **Weihao Yu**, and Tianshui Chen, "Image scene graph generation method and device". (under view, Application No. 201811149481.7)
- [3] Weijiang Yu and Weihao Yu, "High gain bandwidth product electronic amplifier device", CN205566232U.
- [4] Jiayao Huang, Fu Deng, **Weihao Yu**, Ruihuang Zhao, Bo Ke, Zhiqiang Liao, and Dongmei Deng, "Method and device for generating second order Hermitian complex function Gaussian beam", CN105467608A.
- [5] Jiayao Huang, Fu Deng, **Weihao Yu**, Ruihuang Zhao, Bo Ke, Zhiqiang Liao, and Dongmei Deng, "Device for generating a second-order Hermitian complex function Gaussian beam", CN205281028U.
- [6] Weijiang Yu, Xin Huang, and **Weihao Yu**, "Control device for automatic page turning and electronic reader device", CN205721730U.
- [7] Fu Deng, Ruihuang Zhao, Jiayao Huang, **Weihao Yu**, and Dongmei Deng, "Device for manipulating the direction of propagation of a circle of Airy", CN205405030U.
- [8] Ruihaung Zhao, Fu Deng, Jiayao Huang, and **Weihao Yu**, "Device for generating Airy Gaussian vortex beam", CN205620619U.
- [9] Weixuan Wang, Yuanfeng He, Zhun Zhang, Chengzhang Zheng, and **Weiaho Yu**, "Quasi-ultrasonic controlled multi-mode intelligent LED light", CN205213079U.
- [10] Liang Lin, Tianshui Chen, Zhouxia Wang, Guanbin Li, **Weihao Yu**, and Lin Xu. "Multi-label image recognition method and device", CN108133233A.
- [11] Liang Lin, Tianshui Chen, Hui Cheng, Xiaonan Luo, Lin Xu, and **Weihao Yu**, "Method and device for accelerating deep neural network", CN108053027A.

### **Contests**

- [1] Honorable Mention, Interdisciplinary Contest in Modeling, Consortium for Mathematics and Its Applications, 2015, 2016
- [2] Second Price of Guangdong Prince, National Mathematical Contest in Modeling, China Society for Industrial and Applied Mathematics, 2015

# **Program Skills**

Python, PyTorch, TensorFlow, Latex, Matlab

## **Hobbies**

History, long-distance running and Chinese calligraphy

# **Appendix**

- [1] GPA Ranking Certification
- [2] Academic Transcript of Undergraduate

<sup>&</sup>lt;sup>4</sup> Eur. Phys. J. D http://link.springer.com/article/10.1140%2Fepjd%2Fe2016-60677-8

<sup>&</sup>lt;sup>5</sup> J. Opt. Soc. Am. A <a href="https://www.osapublishing.org/josaa/abstract.cfm?uri=josaa-33-6-1025">https://www.osapublishing.org/josaa/abstract.cfm?uri=josaa-33-6-1025</a>

<sup>&</sup>lt;sup>6</sup> J. Opt. Soc. Am. A <a href="https://www.osapublishing.org/josaa/abstract.cfm?uri=josaa-32-11-2104">https://www.osapublishing.org/josaa/abstract.cfm?uri=josaa-32-11-2104</a>



# **Certification of Rank**

This is to certify that Mr./MS. <u>Yu Weihao</u> (student ID <u>20133203018</u>) studied in the <u>Opto-Electronics Information Science and Engineering</u> Major of <u>School of Information and Optoelectronic Science and Engineering</u> in South China Normal University between <u>2013</u> and <u>2017</u> as an <u>undergraduate</u>, with an overall GPA of <u>4.08</u> and ranked <u>1</u> among the <u>82</u> students of the major.

Grading System:

(A) 90-100=4.0-5.0

(B) 80-89=3.0-3.9

(C) 70-79=2.0-2.9

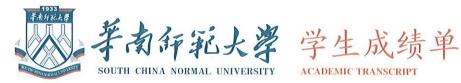
(D) 60-69=1.0-1.9

(F) 0-59=0

Signature:

School seal:

Date: June 13, 2017



Name: Yu Weihao Student ID: 20133203018 School: School of Information and Optoelectronic Science and Engineering

Major: Opto-Electronics Information Science and Engineering

Program: 4-Year Undergraduate

Date of Adm: September 2013

Course	Nature	Credits	Score	
Fall Term 20	13-2014			Mao Zedong Thought Socialist Theory w
Basic Computer Technology	Compulsory	2.0	87	Characteristics
Linear Algebra (II)	Compulsory	3. 0	94	Signal and Sys
Advanced Mathematics (I-1)	Compulsory	6. 0	90	Advanced Engli
Modern and Contemporary History of China	Compulsory	2. 0	76	Thermodynamics a
Basic Computer Application	Compulsory	1.0	Qualified	(Science)
Military Training	Compulsory	1.0	86	Basic Experiment
Physical Education (1)	Compulsory	1.0	93	Foundations of D
Basic English(1)	Compulsory	4. 0	86	Basic Experiment
Spring Term 2	013-2014			Foundations of A
College Physics Experiment(I-1)	Compulsory	1.0	87	Fundamental Gr
Computer Technology Foundation	Compulsory	2. 0	98	
Advanced Mathematics (I-2)	Compulsory			Experiments in
Cognition Practice	Compulsory	6. 0	95	Processing
Moral Cultivation and Bases of Law (Honesty	Compulsory	1.0	87	Quantum Mechan
and self-cultivation)	Computsory	4. 0	90	Fourier Optics Social Practice of
Physical Education (2)	Compulsory	1.0	89	Theory
Basic English(2)	Compulsory	4.0	85	Electrodynamic
College Physics(I-1)	Compulsory	4.0	94	C# Network Progra
Military Theory	Compulsory	2.0	90	Experiments in M Principles
listory of Western Philosophy	Public	2.0	91	Principles of
Fall Term 20	14-2015			Digital Signal
Advanced English(1)	Compulsory	2.0	88	Principles and Inte
Experiments in Engineering Optics	Compulsory	1.0	86	Computer
Probability and Statistics (II)	Compulsory	3. 0	93	Basic Experiments
Applied Optics	Compulsory	3. 0	98	Metalworking P
Engineering Optical Curriculum Design	Compulsory	1.0	82	Curriculum Synthe Electronic Circui
College Physics Experiment(I-2)	Compulsory	1.0	92	Electronic Pra
Complex Variables and Integral Transforms	Compulsory	3. 0	100	
Basic Principles of Marxism	Compulsory	2. 0	87	Professional P
College Physics(I-2)	Compulsory	4. 0	96	Experiments in La
Physical Education (3)	Compulsory	1.0	94	Situation and
Materials Science and Materials World	Public	2. 0	91	Laser Fundamental
Coundations of Circuit Analysis	Selective	4. 0	92	Solid State Ph
Basic Experiments of Electro-circuit	Selective	1. 0	82	undergraduate innova research
Spring Term 20		NO40, '440	300000	Information Secur
Physical Education (4)	Compulsory	1. 0	89	Counter measure
Physical Optics	Compulsory	3. 0	94	Bases and Applica

Course	Nature	Credits	Score
Mao Zedong Thought and Introduction to Socialist Theory with Chinese Characteristics	Compulsory	4. 0	79
Signal and System	Compulsory	3.0	94
Advanced English(2)	Compulsory	2. 0	85
Thermodynamics and Statistical Physics	Compulsory	3. 0	91
Information Retrieval and Utilization (Science)	Public	2.0	96
Basic Experiments of Analogue Circuits	Selective	1.0	78
Foundations of Digital Circuitry	Selective	3.0	94
Basic Experiments of Digital Circuits	Selective	1.0	95
Foundations of Analogue Circuitry	Selective	3. 0	89
Fundamental Graphics	Selective	2.0	86
Fall Term 201	5-2016		
Experiments in Optical Information Processing	Compulsory	1. 0	86
Quantum Mechanics	Compulsory	3. 0	96
Fourier Optics	Compulsory	3, 0	91
Social Practice of Ideological and Political Theory	Compulsory	2. 0	86
Electrodynamics	Compulsory	3.0	88
C# Network Programming Design	Public	2.0	97
Experiments in Microcomputer Principles	Selective	1.0	92
Principles of Communications	Selective	3.0	94
Digital Signal Processing	Selective	3.0	89
Principles and Interface Techniques of Micro Computer	Selective	4. 0	95
Basic Experiments of Communications	Selective	1.0	96
Metalworking Practice	Selective	2.0	90
Curriculum Synthetic Design of Electronic Circuit	Selective	1.0	100
Electronic Practice	Selective	2. 0	85
Spring Term 20	15-2016		
Professional Practice	Compulsory	8.0	91
Experiments in Laser Principle	Compulsory	1.0	79
Situation and Policies	Compulsory	2.0	84
Laser Fundamentals and Techniques	Compulsory	4.0	88
Solid State Physics	Compulsory	3. 0	87
undergraduate innovation & entrepreneurship research	Public	2. 0	95
Information Security and Network Countermeasurd	Public	2. 0	94
Fall Term 201 Bases and Application of Infrared Techniques	6-2017 Selective	2. 0	97

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Page 1/2

Director's Signature (seal)

Teaching Affairs Office (seal)



Name: Yu Weihao

School: School of Information and Optoelectronic Science and Engineering

Course

Student ID: 20133203018

Major: Opto-Electronics Information Science and Engineering

Program: 4-Year Undergraduate

Date of Adm: September 2013

Credits Score

Nature

Course	Nature	Credits	Score
History of Physics	Selective	2. 0	99
Sensor Technique and Application	Selective	2.0	94
Spring Term	2016-2017		
Graduation Thesis	Compulsory	6. 0	90
Introduction to Academics	Compulsory	1.0	93
Innovation Practice	Public	2. 0	95
Acquired Credits	GPA		
171.0	4.08		

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Page 2/2

Director's Signature (seal)