

Wei hao YU

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## Education

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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)

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

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- [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 winning 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

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

Six papers have published

### Conference Papers

Currently my interests are **computer vision and machine learning**.

- [1] **co-first-authored**, "Knowledge-Embedded Routing Network for Scene Graph Generation". (This work has submitted to **CVPR** 2019. 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 paper. We plan to release our trained models and code.)
- [2] Zhouxia Wang, Tianshui Chen, Jimmy Ren, **Wei hao 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.<sup>1</sup>

### 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] **Wei hao 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. <sup>2</sup> (IF=1.321)
- [2] Fu Deng, **Wei hao Yu**, and Dongmei Deng, "Controllably accelerating and decelerating Airy-Bessel-Gaussian

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<sup>1</sup> IJCAI 2018 <https://www.ijcai.org/proceedings/2018/142>

<sup>2</sup> Chin. Phys. B <http://iopscience.iop.org/article/10.1088/1674-1056/25/4/044201/meta>

wave packets”, Laser Phys. Lett., 2016. <sup>3</sup> (IF=2.240)

- [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] Ruihuang 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 **Weihao 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

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- [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

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Python, PyTorch, TensorFlow, Latex, Matlab

### Hobbies

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History, long-distance running and Chinese calligraphy

### Appendix

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

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<sup>3</sup> Laser Phys. Lett. <http://iopscience.iop.org/article/10.1088/1612-2011/13/11/116202/meta>

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

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

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



华南师范大学  
SOUTH CHINA NORMAL UNIVERSITY

## Certification of Rank

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

School seal:



Date: June 13, 2017





Name : Yu Weihao

School : School of Information and Optoelectronic Science and Engineering

Program: 4-Year Undergraduate

Student ID : 20133203018

Major : Opto-Electronics Information Science and Engineering

Date of Adm : September 2013

Course	Nature	Credits	Score
Fall Term 2013-2014			
Basic Computer Technology	Compulsory	2.0	87
Linear Algebra (II)	Compulsory	3.0	94
Advanced Mathematics (I-1)	Compulsory	6.0	90
Modern and Contemporary History of China	Compulsory	2.0	76
Basic Computer Application	Compulsory	1.0	Qualified
Military Training	Compulsory	1.0	86
Physical Education (1)	Compulsory	1.0	93
Basic English(1)	Compulsory	4.0	86
Spring Term 2013-2014			
College Physics Experiment(I-1)	Compulsory	1.0	87
Computer Technology Foundation	Compulsory	2.0	98
Advanced Mathematics (I-2)	Compulsory	6.0	95
Cognition Practice	Compulsory	1.0	87
Moral Cultivation and Bases of Law (Honesty and self-cultivation)	Compulsory	4.0	90
Physical Education (2)	Compulsory	1.0	89
Basic English(2)	Compulsory	4.0	85
College Physics(I-1)	Compulsory	4.0	94
Military Theory	Compulsory	2.0	90
History of Western Philosophy	Public	2.0	91
Fall Term 2014-2015			
Advanced English(1)	Compulsory	2.0	88
Experiments in Engineering Optics	Compulsory	1.0	86
Probability and Statistics (II)	Compulsory	3.0	93
Applied Optics	Compulsory	3.0	98
Engineering Optical Curriculum Design	Compulsory	1.0	82
College Physics Experiment(I-2)	Compulsory	1.0	92
Complex Variables and Integral Transforms	Compulsory	3.0	100
Basic Principles of Marxism	Compulsory	2.0	87
College Physics(I-2)	Compulsory	4.0	96
Physical Education (3)	Compulsory	1.0	94
Materials Science and Materials World	Public	2.0	91
Foundations of Circuit Analysis	Selective	4.0	92
Basic Experiments of Electro-circuit	Selective	1.0	82
Spring Term 2014-2015			
Physical Education (4)	Compulsory	1.0	89
Physical Optics	Compulsory	3.0	94

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 2015-2016			
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 2015-2016			
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 Countermeasures	Public	2.0	94
Fall Term 2016-2017			
Bases and Application of Infrared Techniques	Selective	2.0	97

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Print Date: 2017-06-22

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Director's Signature (seal)

Teaching Affairs Office (seal)




### ACADEMIC TRANSCRIPT

Program: 4-Year Undergraduate

Date of Adm : September 2013

Course	Nature	Credits	Score



熊廷

Print Date: 2017-06-22

Teaching Affairs Office (seal)