

# ZHANG CHUHENG

## PERSONAL INFORMATION

---

PLACE AND DATE OF BIRTH: Hubei Province, China | 29 March 1994  
ADDRESS: Dorm 4-430, Nanyuan, No.22 Hankou Road,  
Nanjing University, Nanjing, Jiangsu Province,  
P.R.China  
PHONE: +86 15851810218  
EMAIL: zhangchuheng123@live.com  
HOMEPAGE: sealzhang.tk (for more information)

## EDUCATION

---

SEPT 2012 Undergraduate  
till now **Nanjing University**, Nanjing, JIANGSU, CHINA  
Photoelectric Science, Physics Department  
GPA: 4.564/5.0 91.28/100 RANKING: 5/152 (First six semesters)

SEPT 2006 Junior and Senior High School  
-SEPT 2012 **Chengdu Foreign Language School**, Chengdu, SICHUAN, CHINA

## RESEARCH EXPERIENCES

---

MAY, 2014 - present	<p>Research on <i>Super Resolution Imaging of Fresnel Incoherent Hologram</i> Department of Optic Electronics, School of Physics, Nanjing University Supervisor: Prof. Ding Jianping</p> <p>The aim of our research is to obtain image of Fresnel Incoherent Hologram of high quality. Both experimental construction and computational processing are concerned. I take the part of the project concerning computational reconstruction of the whole optical process in MATLAB and algorithm designing to refine the image obtained by experiments. The algorithm adopted is based on phase-shifting.</p>
SUMMER, 2015	<p>Research on <i>Ultrahigh-resolution optical imaging deep in tissue - Nanoscope-in-a-Needle</i> Optical+Biomedical Engineering Laboratory, University of West Australia Supervisor: Prof. David Sampson</p> <p>The group is the pioneer of a Microscope-in-a-Needle, an OCT based novel optical and imaging technique. The part of work I have done is aiming at segmenting the biological images gained from the experiment using machine learning approach. The combination of MATLAB and Weka software package are used in the developed tool which is tested and works well on a set of ssTEM images of neural tissue of Drosophila Larva.</p>

SEP, 2015 - PRESENT | Dissertation Research on *Evolutionary Algorithm on the Learning of Deep Network*  
LAMDA(Learning and mining from DatA), Department of Computer Science, Nanjing University  
 Supervisor: A/Prof. Yu Yang  
 As it is known, traditional back propagation algorithm may encounter problems when applied to deep neural networks. The aim of this research is to find an algorithm which involves the idea of Evolutionary Algorithm to the conventional algorithm to train a deep network. Now I am working intensely on this research.

## ACTIVITIES

---

2012 | Member of Propaganda Department at the Student Union | Member of Technology Department at PIVOT SOCIETY

2013 | Vice President of PIVOT SOCIETY | Minister of Propaganda Department at society of SRTP

MARCH, 2014 | Primary Planner of WANYOUQINGNIANHUI with GUOKR.COM

MAY, 2014 | Primary Planner of ORAL HISTORY OF PHYSICS DEPARTMENT OF NANJING UNIVERSITY - DEDICATED TO 100TH ANNIVERSARY  
 Resulting publication: ORAL HISTORY OF PHYSICS DEPARTMENT OF NANJING UNIVERSITY - HIGER EDUCATION PRESS

## AWARDS AND HONORS

---

YEAR OF 2012	National Scholarship(8,000 RMB)	Top 1%
YEAR OF 2013	XingyeZeren Scholarship(2,500 RMB)	Top 5%
YEAR OF 2013	Renmin Scholarship for Outstanding in Social Works	Top 15%
NOV. 2013	University Physics Competition(UPC) (USA)	Silver Prize
SEPT. 2014	Undergraduate Mathematical Contest in Modeling (CHN,leader)	Second Prize
FEB. 2015	Mathematical Contest in Modeling (MCM) (USA,leader)	Meritorious

## PROFESSIONAL SKILLS

---

PROGRAMMING/SOFTWARE: C/C++(proficient), C#, PHP, MySQL, HTML,  $\text{\LaTeX}$ (proficient), MATLAB(proficient), Wolfram Mathematica, COMSOL

THEORETICAL/EXPERIMENTAL: Basic model construction in Physics, Optical experiment setup

## STANDARIZED TEST

---

NOV. 2013	TOEFL(iBT)	92(Reading 24, Listening 26, Speaking 20, Writing 22)
DEC. 2014	GRE	Verbal 153, Quantitative 170, Analytical Writing 4.0
JUN. 2013	CET-4	585
DEC. 2013	CET-6	532
DEC. 2013	Computer Level Test	Fine (level 2, C-language)