

# Zhikai HUANG

## Curriculum Vitae

### PERSONAL DETAILS

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*Birth* July 22, 1997  
*Address* Xi'an Jiaotong Univ, Xianning West Road, Xi'an, China  
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*Website* [Xiahefan's Gallery](#)

### EDUCATION

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**B.E. expected Jun 2019, Electronics Engineering** 2015 - now  
*Xi'an Jiaotong University, China (State Key Univ., Member of 985 & C9 League)*  
**GPA: 89.25/100**([Transcript](#)) **Rank: ~top 5%**  
Relevant Courses: Analog IC Design, Digital IC Design, Semiconductor Devices, Signal and System, Feedback Control Theory, Computer Architecture, Electromagnetic Field and Wave

### RESEARCH EXPERIENCE

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**Undergraduate Research Assistant** Jun 2018-now  
*[Sankey Lab](#), [McGILL University](#), Canada, Full-time*

Together with the Childress and Pioro-Ladrière groups, we are building toward a hybrid system in which nanoscale magnetic circuits controlled by spin transfer are coupled to the spins of quantum emitters in diamond (the state of which can be optically prepared and read out).

**Undergraduate Research Assistant** Feb-Jun 2018  
*Xi'an Jiaotong University, China, Part-time*

Under the supervision of Prof. Ming YE, we put forward a novel, non-destructive way to measure the sheet-resistance of metal sheet with waveguide, which shows advantages compared to 4-probe technique.

**Undergraduate Research Assistant** Sep-Dec 2017  
*[IAIR](#), Xi'an Jiaotong University, China, Part-time*

Under the supervision of Prof. Longjun LIU, we implement neural networks based on numpy for specific applications, for example figure recognition on MNIST, experiments on ImageNet library. And learn hardware design principles to accelerate deep learning procedures on FPGA.

### WORK EXPERIENCE/WORKSHOPS

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**Integrated Circuits Test Worker** Summer 2017  
*[XIGU Microelectronics Co., Ltd](#), China, Full-time*

I learn the data sheet of various integrated circuits, and use specific IC test equipment to measure the performance of ICs to make sure they work in right state. The work let me understand deeper with IC industry.

**Workshop Taker for INCF 2018** Feb-Jun 2018  
*[Virtual Brain NODE7 Workshop](#), [Montreal Neurological Institute](#), Canada*

In the workshop we will explain the fundamental principles of full brain network modeling using the open source neuroinformatics platform The Virtual Brain (TVB). This simulation environment enables the biologically realistic

### Workshop Taker for MITACS Interns

Apr-Jul 2018

*MITACS Workshops for Professional Development, MITACS, Canada*

Under the supervision of Prof. Longjun LIU, we put forward a alkjsd alsjdlka ldkjsa lkasj dlksajd lksajdksa d sauhd ,sa dlksa dlksajd daslij dla daslj

## ONLINE COURSES

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### Understanding Research Methods

Cousera.org

*University of London, Certificate*

In this course, I learn several fundamental questions about doing research, including the rise of a research question, how to do a good literature review, how to manage and plan the research and do the showcase. We discuss in the course forum with lectures and students from different countries and regions.

### Writing in the Sciences

Cousera.org

*Stanford University, Course Notes*

In this course, I learn a wide range of things, from punctuation to whole passages about scientific writing; I learn detailedly about drafting and publishing a scientific paper. Also learn how to write literature review, grants, personal statement, research plan, etc.

## SELECTED HONORS/AWARDS

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2018.04	Undergraduate Internship Scholarship, CSC & MITACS
2017.11	SAMSUNG Scholarship (5%), Samsung Inc.& XJTU
2017.10	Excellent Student Award (15%), XJTU
2017.04	Second Prize in Mathematics Modelling Contest
2016.12	Third Prize in Undergraduate Physics Tournament
2016.10	Siyuan Scholarship (20%), XJTU
2016.10	Excellent Student Award (15%), XJTU
2016.07	Full Scholarship for Summer Shool of SPbPU, Russia, SPbPU

## STANDARD TEST SCORES

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TOEFL	98 ( R28, L21, S12, W24 )
GRE	319 ( Verbal159, Q21, Writing 3.5 )

## SKILLS

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Test and measurement: Signal generators, oscilloscopes, spectrum analyzers, LabVIEW  
Hardware description languages: Verilog  
High-Level Languages: C, C++, Python  
Algorithm development environments: MATLAB  
Design automation tools: Quartus, Modelsim, HSpice, Multisim, Cadence  
Others: HFSS, CST, L<sup>A</sup>T<sub>E</sub>X

*Never too late to finish your dream; the life is waiting for you to explore.*