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<u>Education Background</u>			
09/2019-12/2021	Northwestern University		Evanston, IL, U.S.
	M.S. in Computer Engineering	Major GPA: 4.0/4.0	
09/2013-06/2017	Peking University (PKU)		Beijing, China
	B.S. in Computer Science and Technology	Major GPA: 3.11/4.0	
<u>Research Experience</u>			
06-12/2021	Co-researcher	NuLogiCS research Group, Northwestern University	
Logic encryption related research <i>(supervised by Prof. Hai Zhou)</i>	Research content: learning the basic knowledge of logic and cryptography to be used in logic encryption research. Try to raise and solve the open problems in this field. Work done: <ul style="list-style-type: none">➤ Systematically reading key research papers in the field of logical encryption.➤ To try to encrypt the circuit design in the synthesis stage using techniques including rewriting, obfuscation and so on. Expertise acquired: basic knowledge of logic and cryptography required for logic encryption research, commonly used logic design manipulation libraries and open source tools		
07-09/2020	Co-researcher	Online Market Laboratory, Northwestern University	
Survey on Persuasion <i>(collaborated with Yingkai Li, supervised by Prof. Jason Hartline)</i>	Research content: to make familiar with Bayesian persuasion, persuasion economy and monotone persuasion, to ask questions worth discussion Future work: to dig further on some open questions: <ul style="list-style-type: none">➤ Simple conditions on the primitives that guarantee constant approximation of the monotone persuasion➤ Robust persuasion under various models Expertise acquired: how to follow research on a certain theoretical topic and find open questions		
04-06/2020	Independent Researcher	Online Market course, Northwestern University	
Online Revenue Maximization on Selling Introductions <i>(supervised by Prof. Jason Hartline)</i>	Research objective: to design a mechanism for Selling Introductions problem and maximize online revenue. Work done: <ul style="list-style-type: none">➤ Completed designing a mechanism with the known distribution of the value of employers and employees to meet by the priced introduction, proved the mechanism to be truthful➤ Maximized expected revenue by maximizing virtual welfare➤ Using exponential weight method to do online learning on the mechanism Expertise acquired: basic knowledge about game theory, mechanism design, online market and several online learning algorithm, how to code in both Java and R to perform online learning		
04-06/2020	Independent Researcher	Scalable Software Architecture course, Northwestern University	
A news search engine <i>(supervised by Prof. Stephen Tarzia)</i>	<ul style="list-style-type: none">➤ Research objective: to realize a scalable news search engine➤ Work done: a complete search engine based on AWS cloud service, including front-end, back-end and load balancing functions➤ Expertise acquired: industrial-level large-scale software design technology		
01-03/2020	Co-researcher	Theory+X Seminar, Northwestern University	
Survey on Adaptive Data Analysis and Everlasting Database <i>(supervised by Prof. Jason Hartline)</i>	<ul style="list-style-type: none">➤ Work content: following Dwork et al's research on Adaptive Data Analysis and Woodworth et al.'s research on Everlasting Database, Zrnic and Hardt's research on Natural adaptive analysts was discussed.➤ Expertise acquired: basic concepts and methods of computational theory, including Hoeffding's inequality, etc.		

06/2017 -01/2018	Independent Researcher	Center for Energy-Efficient Computing and Applications, PKU
GRT Sensing v1.0 (supervised by Prof. Tao Wang)	<ul style="list-style-type: none">➤ Research objective: to equip household robot with GRT sensing system with the function of fall prevention for the elders via recognizing human status through walls➤ Work done: completed the construction of GRT Sensing v1.0 for real-time display of CSI and space disturbance➤ Expertise acquired: network protocol stack, com transmission library, gnuplot, and the architecture of GRT 2.0	
03-07/2017	Co-researcher	Software Engineering Institute, PKU
“Waiter” Cell phone software (supervised by Prof. Gang Huang)	<ul style="list-style-type: none">➤ Functions: food-ordering with voices via multiple applications➤ Work content: object-oriented analysis and design (wrote using codes—voice API, Yanyun Reflection API for inter-App ordering)➤ Practical application: under negotiation with investors	
05/2017	Independent Researcher	Institute of Microelectronic, PKU
Wifi Connector for projector (diploma design, supervised by Prof. Dunshan Yu)	Achievements: <ul style="list-style-type: none">➤ Completed a connector for projector via Wi-Fi➤ “Excellent Graduation Design” of PKU (top 5%) Work content: <ul style="list-style-type: none">➤ Adopted object-oriented technique for complete analysis and design➤ Analyzed the transmission property and designed server and client based on Netty for asynchronous video stream transmission➤ Deploy design at multiple ends, achieved expected experimental outcome after debugging	
04/2016	Co-researcher	Center for Energy-Efficient Computing and Applications, PKU
FPGA-based CNN Accelerator (supervised by Prof. Guangyu Sun)	<ul style="list-style-type: none">➤ Research objective: to learn how to do FPGA design via high-level synthesis tools and realize hardware optimization on convolution calculation➤ Work done: learned how to use Tcl scripts to modify specific calculation processes via the Xilinx Vivado tool chain	
<u>Work Experience & Internship</u>		
01/2018 – 08/2019	Project Manager	Beijing Yidian Science and Technology Co., Ltd
“Yidian” Online-Diagnosis Platform	<ul style="list-style-type: none">➤ Features: a multi-sided platform to connect online diagnosis and treatment and offline resources➤ Work done: completed the major part of the platform with functions of online inquiry, hospital searching, online registration and after-treatment services➤ Expertise acquired: communicating work with doctors and patients, designing the interface	
07/2015	PD & Test Engineer	Beijing Simpulife Science and Technology Co., Ltd
“Uniwork” Cell Phone Software	Features: intelligent cell phone software for college students (facilitating event management, notice issuing, and management of student organizations) Work Content: <ul style="list-style-type: none">➤ Participated in product positioning, design and testing of the first edition➤ Completed all assessment and debugging work	
<u>Other Information</u>		
Award	3 rd Prize	ACM Programming Contest of PKU
05/2015	Our team ranks 35 among 377 teams from and not limited to Peking University.	
Leadership	Director	Liaison Dept. of the Students Union of PKU
09/2014-07/2015	<ul style="list-style-type: none">➤ Designed posters and outreach programs for group activities organized by Students Union➤ Helped with event management issues	
Skills	<ul style="list-style-type: none">➤ Language: Java, C/C++, VHDL/Verilog, Python, Rust, Matlab, R, etc.➤ Software: Xilinx Vivado, Intel Quartus, ModelSim, Jetbrain Tools, Android Studio, Xcode, etc.➤ Tool: CUDA, OpenCV, OpenBR, Maven, Git, AWS SDK, etc.	