

Tiou Wang

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EDUCATION

Sep.2019-Jun.2023	Harbin Institute of Technology B.E. in Electronic Information Engineering at School of Electronics and Information Eng. • Undergraduate Cumulative Average Score:85.2/100	Harbin, CHINA
Aug.2023-Jun.2025	KTH Royal Institute of Technology M.S.C. in Information and Internetwork Engineering at School of EECS	Stockholm, SWEDEN

RESEARCH AND PROFESSIONAL REEXPERIENCES

Sep.2022- May.2023	Research On CNN-based Infrared Weak Small Target Detection Method Graduation Design Advisor: Prof. Junping Zhang(HIT) • Analyzed the characteristics of infrared images and models noise and background • Employed a fusion image suppression method based on local contrast information entropy and saliency similarity initially • Used a dense attention mechanism network to complete the detection • Taken several strategies to accelerate the training and reduce VRAM usage • Completed an essay in Chinese	Harbin Institute of Technology
Jul.2022- Sep.2022	Digital Integrated Circuits (Introduction to design of VLSI) Advisor: Prof. Dejan Marković (UCLA) • Completed the online research seminar Digital Integrated Circuits (Introduction to VLSI) • Gained the knowledge about digital circuits, VLSI, and processor architectures • Learned the fundamental modeling and factors of IC design • Accumulated small scale integrated circuits design experience	
Sep.2020- Jun.2021	Intelligent Hospital Bed to Assist Patients' Movements • To predict the patients' further movements through deep learning of the pressure data of each support column on the bed, so as to assist the patient's movements by controlling the movement of different support columns, and continuously enhance the accuracy of motion recognition based on cloud data, as well as monitor the patients' data • Mainly responsible for setting up a cloud environment • Accomplished in the work of bed lifting construction design and neural network building • Developed a deeper understanding of neural network application in image and gained fundamental knowledge of MCU	Harbin Institute of Technology
Oct.2019-Jun.2020	Study of Writing Styles Based on Deep Learning TEAM LEADER • To study about changing trends between Chinese characters of Running Hand based on convolutional network, and uses this as a training set to imitate the writing style • Involved in the work of parameter debugging of network layer construction and training • Assigned missions to members according to their strengths and organized periodic meetings about the progress	Harbin Institute of Technology
Nov.2022-Dec.2022	Fabrication of AM Modulation Circuit Transmitting and Receiving Based on Triode in High Frequency Electronic Circuit • Completed the work of circuit simulation and welding based on Multisim • Read numerous references and achieved optimization of emitter follower, pull-up resistor and cross coupling circuit	

INTERSHIPS

Jan.2022- Mar.2022	Shanghai Fudan Microelectronics INTERN, INTERNET INNOVATION DEPARTMENT • Participated in the project of NIO Bluetooth car keys testing and bug fixes • Involved in the program of the Ministry of Communications National Traffic NFC testing • Learned the communication protocol of Bluetooth and the remote-control architecture of modern cars • Understood the project composition and test methods of NFC • Accumulated knowledge and practice experience of the outdoor, indoor and shielding environment testing of standard communication	Shanghai, CHINA
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SKILLS

Language	• Mandarin, English(TOEFL:100)
Software	• Office
Programming Languages	• MATLAB, C++, Python