# Huasen Xi

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#### Education

University of Chinese Academy of Science(UCAS)

Sept 2021-Present

University of California, Berkeley(UCB)

Jan 2024-Present

Bachelor of Engineering (Expected 2025) GPA: 3.92/4

#### **Academic Experiences**

#### C Language Programming for Gobang

## September 2022 - January 2023

Institution: University of Chinese Academy of Sciences

Director:Chenggang Wu, Ph.D. Institute of Computing Technology, Chinese Academy of Sciences.

- Completed the Gobang C language program that can achieve human-machine and human-person combat functions, and implemented the replay and repentance functions.
- Using pruning technology to simplify the scoring function and achieve deeper levels of search.

#### Airborne Synthetic Aperture Radar Imaging Project

#### November 2021 - Present

Institution: University of Chinese Academic of Science

Director: Prof. Dr. Robert Wang, Aerospace Information Research Institute (AIR), Chinese Academy of Sciences (CAS)

Mastered the significant techs of Synthetic Aperture Radar, including Pulse Compression and Range

Migration Correction and etc. Operated phased array and other equipment on-site.

- Specifically designed the various indicators and parameters of a drone equipped with SAR.
- Successfully deployed synthetic aperture radar on drones and completed near-Earth scanning imaging.

#### COD-Lab

#### February 2023- July 2023

Institution: University of Chinese Academy of Sciences, Institute of Computing Technology

Director: Zhang Ke, Ph.D. Institute of Computing Technology, Chinese Academy of Sciences.

- Designed a single cycle CPU based on mips instructions, as well as multi cycle CPUs based on risc-v
  instruction set and mips instruction set with D-cache and I-cache.
- Completed the dnn convolutional neural network accelerator.

## MRI image recognition and classification of Alzheimer's disease

#### February 2023- July 2023

Institution: University of Chinese Academy of Sciences, Institute of Automation Chinese Academy of Sciences Director: Professor Zhaoxiang Zhang, PhD, Center for Research on Intelligent Perception and Computing

- Learned the use of Resnet neural networks and improved classification accuracy using the ensemble learning method of neural networks and SVM.
- Ultimately, the recognition readiness rate of Alzheimer's patients's MRI was increased to 0.98.

### Applying SAM to Video Segmentation

### July 2023-August 2023

Systematically read the principles of SVM and attempted to apply it to each frame of the data stream to

## **Honors and Awards**

2023 American College Student Mathematical Modeling Competition's Award

May 2023

Second class scholarship of UCAS

October 2022

Outstanding student of UCAS

October 2022

# Extracurricular Activities

Providing academic assistance and guidance to lower grade students as peer tutoring

September 2022 - January 2023

## **Skills and Hobbies**

TOEFL:90(R22, L27, S21, W20) TEST DATE:August 15th 2023

Programming:C,go,python,verilog.

Chess: Chinese Chess, International Chess, and Japanese General Chess

Sports:Basketball, Pingpang, Tennis, Swimming.