WANG, Chongyu

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Education

Zhejiang University (ZJU) *2018.9-2022.7*
Electrical and Computer Engineering—Bachelor of Engineering
Curriculum GPA：3.79/4.00

University of Illinois at Urbana-Champaign（UIUC） *2018.9-2022.7*
Electrical and Computer Engineering—Bachelor of Science
Curriculum GPA：3.74/4.00

Publication

Liu Tianyu, Junyu Chang, Chongyu Wang, Liangjing Yang, *Specular Reflections Detection and Removal Based on Deep Neural Network for Endoscope Images*, accepted by *2021 43rd Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC).*

Research Experience

Specular Reflections Detection and Removal Based on Deep Neural Network for Endoscope Images
Instructor: Prof. Liangjing Yang *2020.3-2021.7*

- Aimed to detect and restore specular reflections caused by metal instruments or smooth tissue membrane during surgical operations based on Deep Neural Network.
- Proposed a novel model based on deep learning framework, known as Surgical Fix Deep Neural Network (SFDNN), to detect the reflection points in a surgical video.

Knowledge Extraction and Retrieval of Diesel Engine Event Report in Nuclear Power Plant Based on National Language Processing *2020.3-present*
Project leader of this National Student Research Training Program, Instructor: Prof. Hongwei Wang

- Built a nuclear corpus based on the diesel-related event reports provided by Qinshan Nuclear Power Station.
- Proposed a novel statistics-based Chinese key-phrase extraction model.
- Plan to build a search engine system for event reports based on the extracted key-phrase.

Course Experience

Teaching Assistant *2021.9-present*
Teaching Assistant in Computer Systems & Programming Course

- Working with Prof. Pavel Loskot and Prof. Steve Lumetta

Bomberman Game Based on FPGA *2020.8-2021.1*
Digital Systems Laboratory Course Final Project, Instructor: Prof. Chushan Li

- Used Intel FPGA development board and Quartus to develop a Bomberman game.
- The main logic of the game and interfaces was written by SystemVerilog.

The Basic Implementation of Operating System based on x86 architecture *2021.1-2021.5*
Computer Systems Engineering Course Final Project, Instructor: Prof. Steven S. Lumetta

- Implemented the real-time clock (RTC) and its virtualization, created a terminal driver to handle the keyboard input, wrapped System Call, and allocated memory and implement paging, including initialization of paging and map the virtual and physical address during scheduling.

Honors & Awards

Second Prize of The 11th Chinese Mathematics Competitions *2019.12*