Shuhong Ye

+86-19807291024
shuhongye233@gmail.com
https://github.com/kenn-san

EDUCATION

University of Nottingham Ningbo China — Ningbo, China
BSc Hons Computer Science with Artificial Intelligence — *Nov 2018 - Jul 2023 (Expected)*
Overall GPA: 4.0/4.0
Honors and Awards: Head's scholarship (2019)
Courses: Machine Learning (COMP3055 UNNC): **A+**, Computer Graphics (COMP3069 UNNC): **A+**

PUBLICATIONS

[1] Weikai Kong*, **Shuhong Ye***, Chenglin Yao, Jianfeng Ren. Confidence-based Event-centric Online Video Question Answering on a Newly Constructed ATBS Dataset, accepted to **IEEE International Conference on Acoustics, Speech and Signal Processing *(ICASSP '23)*. (*equal first authors)** **[pdf]** **[project]** **[code]** **[dataset]**

[2] **Shuhong Ye***, Weikai Kong*, Chenglin Yao, Jianfeng Ren, Xudong Jiang. Video Question Answering Using CLIP-Guided Visual-Text Attention, accepted to **IEEE International Conference on Image Processing *(ICIP '23)*. (*equal first authors)** **[pdf]** **[code]**

EXPERIENCE

Video Question Answering Research Intern — Ningbo, China
Intelligent Simulation and Digital Port Lab — *Jan 2022 - Jun 2023*
Supervisor: *Prof. Jianfeng Ren*

- Defined a new set of problems called Online Open-ended Video Question Answering (O^2VQA). Proposed a Confidence-based Event-centric Online Video Question Answering (CEO-VQA) model to solve the problem. Constructed a dataset to evaluate the online VideoQA application. Work published in ICASSP 2023. **[1]**
- Proposed a visual-text attention mechanism to utilize the Contrastive Language-Image Pre-training (CLIP) to guide the cross-modal learning for VideoQA and address the insufficient linguistic supervision problem. Work accepted to ICIP 2023. **[2]**

Virtual Reality Laparoscopic Surgery Simulation Research Intern — Ningbo, China
Intelligent Simulation and Digital Port Lab — *Jul 2021 - Oct 2021*
Supervisor: *Prof. Ying Weng*

- Developed a laparoscopic surgery training application with Unity and Steam VR SDK. Implemented soft tissue simulation for gallbladder and liver using Obi Physics packages.

Remote Sensing Image Processing Research Intern — Ningbo, China
UNNC School of Geographical Sciences — *May 2021 - Jul 2021*
Supervisor: *Prof. Meili Feng*

- Developed remote sensing image processing tools with Google Earth Engine API, Python and R for cloud removal and water Remote Sensing.

SELECTED COURSE PROJECT

A Framework for the Competition of Searching Algorithms — *Nov 2021 - Apr 2022*
Tech Leader, Software Engineering Group Project, supervised by Prof. Jiawei Li
Developed a framework to evaluate the performance of algorithms on 4 optimization problems, multi-armed bandits, bin packing, portfolio selection and job shop scheduling.

SKILLS

Programming Skills: Python, C/C++ **Technologies:** Pytorch, OpenGL, Unity, LaTeX
Languages: TOEFL 100 (Speaking: 22, Writing: 25)