LIANG, Kunchangtai

Email: liangkct at yahoo.com / K.Liang-4 at sms.ed.ac.uk

TOEFL iBT: 104 (R30, L26, S23, W25, 10/2019)

GRE: 324 + 4.0 (V154, Q170, AW4.0, 05/2019)

SKILLS: Python, C/C++, PyTorch, Linux Shell

EDUCATION

Master's student, University of Edinburgh　　　　　**09/2021 – Present**

　　School: School of Informatics

　　Major: Computer Science

Bachelor of Science, Peking University　　　　　**09/2016 – 07/2020**

　　School: School of Electronics Engineering and Computer Science

　　Major: Intelligence Science and Technology

　　GPA: 3.572 / 4.0

　　Thesis: Research on Local Feature Extraction and Video Coding for Machines Based on Neural Networks

　　　　Grade: A

WORK & RESEARCH EXPERIENCE

Core Researcher (Intern), iFLYTEK Co., Ltd.　　　　　**08/2020 – 08/2021**

　　Supervisor: Zhiguo Wang (Executive President, R&D Group, iFLYTEK)

　　Immediate superior: Jiajia Wu (Manager of CV5, R&D Group, iFLYTEK)

　　Topic: Optical Character Recognition and scene text detection

- Designing algorithm for accurate scene text detection
- Improving commercially deployed OCR models to reduce errors in output
- Participating in ICDAR 2021 Competition on Scientific Literature Parsing

Research Intern, Peng Cheng Laboratory　　　　　**07/2019 – 08/2019**

　　Advisor: Tao Mei (Professor, Assistant Director of PCL)

　　Topic: Remote Operated Vehicle control algorithm

- Collecting data of eye movement of human operator aligned to ROV camera
- Designing algorithm to detect target in underwater videos guided by the focus of human eye
- Establishing an end-to-end framework of visual servo based on eye-guided detection

Undergraduate Intern, STRUCT Group, PKU　　　　　**09/2017 – 06/2020**

　　Advisor: Jiaying Liu (Associate Professor, Wangxuan Institute of Computer Technology, PKU)

　　Topic: Video understanding

- Contributing to data verification and baseline experiments on human action dataset PKU-MMD v2 (PKU Multi-Modality Dataset Part II)
- Participating in designing of a Video Coding for Machines (VCM) algorithm based on skeleton-based human action
- Designing neural networks for local feature description on images

Teaching Assistant, PKU   **09/2017 – 01/2018**

Course: Introduction to Computation (A), PKU 04830041
Instructor: Yafei Dai (Professor, School of EECS, PKU)

Recruited as undergraduate TA because of 100/100 grade earned 01/2017

- Grading coursework (weekly assignments and major project)
- Holding Q/A sessions
- Invigilating mid-term and final exams

PAPERS AND PROPOSALS

- Sifeng Xia*, **Kunchangtai Liang***, Wenhan Yang, Ling-Yu Duan, and Jiaying Liu. "An Emerging Coding Paradigm VCM: A Scalable Coding Approach Beyond Feature and Signal," IEEE International Conference on Multimedia and Expo (ICME), 2020. (*Equal contribution)

- **Kunchangtai Liang**, Dezhao Wang, Yuzhang Hu, Sifeng Xia, Wenhan Yang, and Jiaying Liu, "AI M1243: Local Feature Point Detector based on CNN," 10th Meeting of Artificial Intelligence Industry Technology Innovation Strategic Alliance, 2020.

AWARDS AND HONORS

- Award for Scientific Research, PKU   12/2018
- Award for Community or Public Service, PKU   12/2017
- Third prize, PKU Schlumberger Cup programming competition   06/2017

EXTRACURRICULAR ACTIVITIES

- Volunteer at Youth Volunteers Association of EECS, PKU   09/2016 – 11/2019
    - Deputy secretary general   11/2018 – 11/2019
- Member of EECS baseball team   09/2016 – 08/2018