**LIANG, Kunchangtai**

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

Homepage: lkct.github.io

SKILLS

* Python: majority of past experience, including packaging
* PyTorch: experience in Deep Learning, contribution (bug-fix) to PyTorch repository
* C/C++: used in project and school, TA experience
* Computer Vision: project experience, BSc Thesis
* Robotics: project experience

ENGLISH PROFICIENCY

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| TOEFL iBT: 104 (R30, L26, S23, W25) | 10/2019 |
| GRE: 324 + 4.0 (V154, Q170, AW4.0) | 05/2019 |
| CET6: 611 | 06/2017 |
| CET4: 669 | 12/2016 |

EDUCATION

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

School: School of Informatics

Major: Computer Science

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| **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

RESEARCH & WORKING EXPERIENCE

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

Research focus: Optical Character Recognition and Scene Text Detection

* Designing algorithms for accurate Scene Text Detection
* Improving commercially deployed OCR models to reduce errors in output
* Participating in ICDAR 2021 Competition on Scientific Literature Parsing
  + 2nd place in Document Layout Recognition, major contribution

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

Research focus: Video understanding

* Contributing to data verification and baseline experiments on human action dataset PKU-MMD v2
* Collaborating on a Video Coding for Machines (VCM) algorithm based on skeleton-based human action
* Designing neural networks for local feature extraction on images

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

Research focus: Remote Operated Vehicle control

* Aligning eye movement of human operator to ROV camera
* Designing underwater detection algorithms guided by the focus of human eye
* Constructing an end-to-end visual-servo framework based on eye-guidance

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

Course: Introduction to Computation (A), PKU 04830041

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

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

PUBLICATIONS

* 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

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| * Award for Scientific Research, PKU | 12/2018 |
| * Award for Community or Public Service, PKU | 12/2017 |
| * Third prize, Schlumberger Cup programming competition, PKU | 06/2017 |
| * Mayor’s Award for Adolescents Science & Technology Innovation, Hefei | 11/2014 |
| * Third prize, 14th Awarding Program for Future Scientists, China | 10/2014 |

EXTRACURRICULAR ACTIVITIES

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| * Volunteer in PKU Admission Group, Anhui | 07/2021  07/2017 |
| * Volunteer in 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 |