# YANKUN ZHAO

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#### **EDUCATION**

### The Hong Kong University of Science and Technology

• Bachelor of Engineering in Computer Science

• Major CGA: 3.726/4.3, CGA: 3.653/4.3

Hong Kong Sep. 2018 – Present

## Nanyang Technological University

• Exchange Program

• CGA: 4.75/5

Singapore Jun. 2019 – Aug. 2019

#### **PUBLICATIONS**

## **Understanding Distributed Tutorship in Online Language Tutoring**

Meng Xia, Yankun Zhao, Mehmet Hamza Erol, Jihyeong Hong, Juho Kim

- Accepted as a full paper in the 12th International Conference on Learning Analytics and Knowledge (LAK '22)
- https://arxiv.org/abs/2112.03500

# Student Barriers to Active Learning in Synchronous Online Classes: Characterization, Reflections, and Suggestions

Reza Hadi Mogavi, **Yankun Zhao**, Ehsan Ul Haq, Pan Hui, Xiaojuan Ma

- Accepted as a full paper in the Eighth ACM Conference on Learning at Scale (L@S '21)
- https://dl.acm.org/doi/10.1145/3430895.3460126

# A Visualization System for Reflecting on English Speaking Progress under Distributed Tutorship

Meng Xia, Yankun Zhao, Jihyeong Hong, Mehmet Hamza Erol, Taewook Kim, Juho Kim

- Accepted as a poster in Korea Software Congress 2021 (A Korean flagship domestic conference)
- <a href="https://docs.google.com/presentation/d/1hoQYhL77ioDocHLHp2r9YywMYAaK2brV2424KCvKf0">https://docs.google.com/presentation/d/1hoQYhL77ioDocHLHp2r9YywMYAaK2brV2424KCvKf0</a> s/edit?usp=sharing

# RLens: A Computer-aided Visualization System for Supporting Reflection on Language Learning Progress under Distributed Tutorship

Meng Xia, Yankun Zhao, Jihyeong Hong, Mehmet Hamza Erol, Taewook Kim, Juho Kim

• In submission to the 25th ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW '22)

# A Categorized Reflection Removal Dataset with Diverse Real-world Scenes

Chenyang Lei, Xuhua Huang, Chenyang Qi, Yankun Zhao, Wenxiu Sun, Qiong Yan, Qifeng Chen

- arXiv 2021
- https://arxiv.org/abs/2108.03380

# Utilizing Tutor Feedback for Fine-grained Language Progress Reflection in Online English Tutoring via Interactive Visualization

Meng Xia, Yankun Zhao, Jihyeong Hong, Mehmet Hamza Erol, Juho Kim, Filed 2021

# A Power Generation System Based on Bicycles

Yankun Zhao, Xiaoran Ma, Hengyu Zhao

- Utility Model Patent issued by China National Intellectual Property Administration
- Patent No. CN207234642U
- https://patents.google.com/patent/CN207234642U/en (Auto translated by Google)

#### **SERVICES**

## **CHI 2021 Late-Breaking Works**

Reviewer

## RESEARCH EXPERIENCE

#### **KAIST Interaction Lab (KIXLAB)**

Jun. 2021 - Present

- Research Intern, supervised by Prof. Juho Kim
- Defined an emerging and trending educational model online tutoring platforms employing "distributed tutorship"
- Analyzed 15,000+ learners' data to identify major patterns of distributed tutorship and their relationship with language learning outcomes
- Designed and built a visualization system utilizing NLP techniques to support reflection on language learning progress under distributed tutorship
- Designed and conducted semi-structured interviews and survey studies with 500+ learners and 3 expert tutors
- Closely collaborated with an EdTech company, ran weekly meetings with the Head of PM-Product team

### **HCI Lab @ HKUST**

Feb. 2020 - Jun. 2021

- Research Intern, supervised by Prof. Pan Hui and Prof. Xiaojuan Ma
- Harvested data from social media platforms, designed and conducted semi-structured interviews
  and survey studies with 32 students and 8 instructors from universities, conducted a thematic
  analysis of all the qualitative and quantitative data collected to characterize student barriers to
  active learning in synchronous online classes
- Proposed a framework providing a contemporary synthesis of student barriers to online active learning and conducted a summative study with 12 novice educators to evaluate the usefulness and effectiveness of the framework for course planning

## Visual Intelligence Lab @ HKUST

Feb. 2021 – Aug. 2021

- Research Intern, supervised by Prof. Qifeng Chen
- Designed a backbone model for reflection removal
- · Reviewed the literature on reflection removal
- · Performed data cleansing and labeling

#### TEACHING EXPERIENCE

### **HKUST Doo2: Python for Everyone**

Summer 2020

- Teaching Assistant
- Responsibilities: Designing and grading 4 assignments and the final project, answering students' in-class questions in the ZOOM chat box and after-class questions by email, checking attendance

#### **HONORS & AWARDS**

# University Scholarship for Continuing Undergraduate Students, HKUST Dec. 2021

• \$2K, a merit-based scholarship awarded to top 10% continuing undergraduate students at HKUST

## University Scholarship, HKUST Fall 2018, Winter 2018, Spring 2019, Summer 2019

• \$3K, merit-based admission scholarships for 4 semesters

## Dean's List, HKUST

Spring 2020, Fall 2020, Spring 2021

# The First Prize in the Second "Deng Feng" Cup Science and Technology Innovation Competition @ Tsinghua University Aug. 2017

• Awarded to top 5% teams

## The First Prize in Adolescents Science and Technology Innovation Contest Apr. 2017

Awarded by China Association for Science and Technology to top 3% teams

#### **EXTRACURRICULAR ACTIVITIES**

#### Hackathon @ HKUST 2019

Apr. 2019

- Mentor, Executive Technician
- Responsibilities: Helping teams with technical issues, helping participants form teams, managing competition logistics

#### **Smart Car Workshop cum Team Challenging Competition**

Nov. 2018

- Technical Assistant
- Responsibilities: Leading a visual programming workshop, helping teams with technical issues, managing competition logistics

### Film Society @ HKUST

Aug. 2018 – Mar. 2019

- Executive Subcommittee
- Recruited more than 400 new members in collaboration with other subcommittees
- Designed and built a Harry Potter-themed escape room which attracted over 150 people to play within 8 hours

#### **SKILLS**

## **Programming Languages**

• Python, C, C++, Java, JavaScript, R, MATLAB, Arduino

# **Machine Learning/Deep Learning**

• PyTorch, TensorFlow, SciPy, Pandas, NumPy

# **Web Development**

• HTML, CSS, JavaScript, jQuery, Bootstrap, React, Vue

# Completion of Harvard University Non-Affiliate Protecting Human Research Participants (PHRP) Training

• Certified by Harvard University Area IRB

# Completion of the Training Program in the 2020 Hong Kong Blockchain Olympiad

• Certified by International Blockchain Olympiad

# A Go Player of 5 Dan Rank