Zhengcong Fei

Curriculum Vitae

Education

2019-Now Institute of Computing Technology, Chinese Academy of Sciences, Beijing.

M.D. Candidate in Computer Application Technology

Advised by Hao Chi

2015–2019 **EE**, Nanjing University of Science and Technology, Nanjing.

Bachelor of Electronic Information Engineering

GPA: 3.75/4 Rank: 1/165

Research Interests

Language and Vision
Reinforcement Learning

Experience

2020 Sci-fi Novel Generation

July-Dec o sequence generation o BERT-based retrieval

advised by Yan Song

Sinovation Ventures

2019 Search Engine for Mass Spectra

Mar-Jun o DFS search candidates o inverted index o BM25

ICT, CAS

advised by Hao Chi

2018 Multi-Scale Objective Detection

Apr-Oct o feature pyramid o one-stage detection as regression

AAIS, Peking University advised by Jue Zhang

Publications

9 Partial Non-Autoregressive Image Captioning

Zhengcong Fei

AAAI 2021 under review

8 Iterative Back Modification for Faster Image Captioning

Zhengcong Fei

ACM MM 2020

7 Improving Tandem Mass Spectra Analysis with Hierarchical Learning

Zhengcong Fei

IJCAI 2020

6 Actor-Critic Sequence Generation for Relative Difference Captioning

Zhengcong Fei

ICMR 2020 (Oral Presentation)

5 Novel Peptide Sequencing with Deep Reinforcement Learning

Zhengcong Fei

ICME 2020 (Oral Presentation)

4 Fast Image Caption Generation with Position Alignment

Zhengcong Fei

AAAI 2020 Workshop on Artificial Intelligence of Things (Oral Presentation)

3 Better Understanding Hierarchical Visual Relationship for Image Caption

Zhengcong Fei

NeurIPS 2019 Workshop on New In ML

2 pDeep3: Towards More Accurate Spectrum Prediction with Fast Few-Shot Learning Wen-Feng Zeng, Ching Tarn, Zhengcong Fei, Si-Min He

Analytical Chemistry under review

1 GameTag: A New Sequence Tag Generation Algorithm Based on Cooperative Game Theory

Zhengcong Fei, Kaifei Wang, Hao Chi

Proteomics

Challenges

- 2020 The 1st places in the innovation track, Deecamp 2020
- July Sinovation Ventures

this project is about sci-fic novel generation

2020 The 1st places in the artificial intelligence application innovation competition

Sep Huawei Cloud

this project is about AI assisted writing

Honors & Awards

- 2018 China National Scholarship
- 2018 The Mathematical/Interdisciplinary Contest in Modeling (MCM/ICM), **Meritorious**Winner
- 2018 China Undergraduate Mathematical Contest in Modeling, First Prize
- 2018 MathorCup Mathematical Contest, First Prize
- 2017 Suzhou Industrial Park Scholarship
- 2017 National Military Mathematical Modeling League, Second Prize
- 2017 Certification Cup Mathematical Contest, First Prize
- 2016 Mathematics Competition of Chinese College Students, First Prize

2016 Chinese Mathematics Competitions (CMC), First Prize

Skills

Languages C++; Python

Tools PyTorch; Latex

CET-4 571

CET-6 551

Service

Conference NeurIPS 2020; AAAI 2021

Reviewing