Ying Peng

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https://isabellecur.github.io/

EDUCATION

Tongji University   Sep 2018 - Jun 2022

Software Engineering, Bachelor, School of Software Engineering   Shanghai

Hong Kong Polytechnic University   Jan 2021 - May 2021

Department of Computing, Bachelor, Faculty of Engineering   Hong Kong

RESEARCH EXPERIENCE

Research on Complex-valued Meta-learning and Attention Mechanism   Mar 2020 - Present

Tongji University Network and Machine Intelligence Lab   Shanghai

- Completed all experimental code independently. Wrote the main part of the paper.
- Paper(submitted): Signal Transformer: Complex-valued Attention and Meta-Learning For Signal Recognition. (Https://arxiv.org/abs/2106.04392)
- Patent: an analog signal identification method based on complex-valued neural network and attention mechanism. (submitted)

Detection of Diabetic Retinopathy Based on Deep Learning   Feb 2021 - Jul 2021

Cooperation with Tongji Hospital   Shanghai

- Established the model based on the UNet. Used square-weighted Kappa as loss function and other methods for optimization.
- Built a front page to form a complete system that can be used.

PROJECT EXPERIENCE

Kaggle Research Prediction Competition : SETI Breakthrough Listen - E.T. Signal Search   May 2021 - Aug 2021

- Performed data processing, model selection, training, and optimization.
- Got excellent accuracy through model ensembling and pseudo label learning. Gained silver medal in Kaggle Competition. (ranking: 34/768)

Real-time Collaborative Software Development Environment for Lightweight IDE   Apr 2020 - Mar 2021

- Implemented CoVSCode as VSCode's plugin for real-time collaborative programming. (similar to shared documents)
- Was selected as National Innovation Project. Won the silver award in Tongji University Internet+ Contest , and the silver award in "Challenge Cup" Entrepreneurship Plan Competition in Tongji University District.

PROFESSIONAL EXPERIENCE

SenseTime   Jun 2021 - Oct 2021

Deep Learning Framework Development Intern, Research Institute   Shanghai

Participated in developing the deep learning framework - Parrots, including neural network operators developing, model precision commissioning, adaptive quantitative training, mixed precision training and precision analysis visualization tool development.

SenseTime   Dec 2021 - Present

Computer Vision Research Intern, Image Quality Algorithm Department   Shanghai

Research in image quality algorithms including training models for demosaic and super resolustion. Improving RAISR method to finish demoire and demosaic tasks.

HONORS & AWARDS

Undergraduate Scholarship in Tongji University

The Second Prize of WeChat Mini Program Development Competition in East China Division

The Third Prize of "CEMEE" Electromagnetic Environment Mathematical Modeling Competition

The Third Prize of Tongji University Physics Competition