

PENGXIANG WANG (Shawn)

shawn.pxwang@outlook.com · [Homepage & Blog](#) (pengxiang-wang.com)
[LinkedIn](#) (Pengxiang Wang) · [GitHub](#) (pengxiang-wang) · [Clickable links in blue](#)

Summary: PhD candidate in applied mathematics, math background + 7 years of experience on *deep learning*, currently researching *continual learning*



EDUCATION



University of Bristol, School of Engineering Mathematics
Visiting Research Associate, Supervisor: Prof Weiru Liu, Prof Jun Hong

Dec 2023 - Dec 2024
Bristol, UK



Peking University, School of Mathematical Sciences
PhD Candidate, Applied Mathematics, Supervisor: Dr Kedian Mu

2020 - Present
Beijing, China



Beijing Institute of Technology, School of Maths and Statistics
Bachelor of Science, Information and Computing Science
Average Score: 91.5/100, Rank: 2/37, Awarded Outstanding Graduate

2016 - 2020
Beijing, China

PUBLICATIONS

AdaHAT: Adaptive Hard Attention to the Task in Task-Incremental Learning

1st Author,
2024

- Developed a novel continual learning architecture with adaptive gradient adjustment mechanism, making full use of task information
- Resolved network capacity problem and stability-plasticity balance

[ECML PKDD](#)
Conference

Predicting Student Performance Using Weblogs

2019

- Predict student learning performance through anonymized weblog data with a LSTM-based model

[ICCSE](#)
Conference

OPEN-SOURCE SOFTWARE

Continual Learning Arena (CLArena)

2023 – Present
Sole Developer

- Open-source Python package for CL research, released in [PyPI](#)
- Support continual learning/unlearning, multi/single-task learning
- Implemented APIs for multiple CL algorithms, datasets and backbones

SELECTED TALKS

Architecture-Based Approaches in Continual Learning

31/10/2024

- Literature review on a specific methodology in CL research, which is what I am currently researching. Brief intro to the AdaHAT model

[National Frontier Math PhD Forum](#)

A Beginner's Guide to Continual Learning

03/10/2024

- A comprehensive guide to CL concepts, definitions, methodology and challenges, as well as cutting-edge research developments

[UoB FinTech Seminar](#)

SELECTED AWARDS

Mathematical Contest in Modeling (MCM)	International	Meritorious Winner	2019
Chinese Mathematics Competitions	National	Second Prize	2018
Chinese Physics Competitions (Regional)	National	First Prize	2017
Outstanding Student, Outstanding Graduate	University	2017-20 at BIT, 2023-25 at PKU	
Social Worker, Community Service Award	University	2021-2022, 2024 at PKU	

TEACHING EXPERIENCE

Math Teaching Assistant at Peking University

2020 – Present

- Courses: Advanced Mathematics (Calculus), Probability and Statistics
- Conducted [tutorial and QA sessions](#) for undergraduate students

SKILLS

- Programming:** Python, PyTorch (Primary), C, C++, MATLAB. Fluent in LaTeX academic writing
- Languages:** English (Fluent), Chinese (Native), Japanese (Beginner)

- **Extracurricular Leadership:** President of Peking University Student Association for Artificial Intelligence Innovation (PKU SAIIC)