Qi Yang

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Education

HuaZhong University of Science and Technology Wuhan, China
Bachelor of Engineering - Artificial Intelligence and Automation; *Sep. 2015 - June 2019*

GPA: *3.4(Top 30%), especially reached 3.8 on the major courses in last 2 years.*
Courses: *Math Basis(Probability Theory, Calculus, Engineering Mathematics), CS Basis(Data structure, Computer Network, Principle of Micro-Computer, Central/Distributed System, C Programming, Internet Infrastructure), AI(Artificial Intelligence, Machine Learning, Robot Principle), Engineering(Digital circuits, Analog circuit, Signal Analysis), Control(Control Theory, Information System, System Identification, Complexity Science, Systems Engineering),etc.*

Southern University of Science and Technology Shenzhen, China
Master of Engineering - Computer Science and Engineering; *Sep. 2019 - June 2022*

Research Lab: *Nature Inspired Computation and Applications Laboratory (supervised by Ke Tang)*
Publications: *1 SCI-indexed paper (CCF C), 1 EI-indexed paper, 1 working paper, 1 patent under review*
Courses: *Advanced Algorithms, Advanced Artificial Intelligence, Advanced Computer Network, Academic English Writing, etc.*

Skills Summary

Hard Skills:	Python(TensorFlow, Pytorch, Matplotlib, Pandas, etc.), Web(HTML/CSS/JavaScript), Linux workflow
Language:	IETLS 6.5(Reading 8.0); CET-4 and CET-6 certification; Proficient Academic reading/writing;
Soft Skills:	Fast Reading and Learning, Managing Upward, Grant Application/Patent Writing, Leadership
Assessment:	Self-motivated Exploration, Inquisitive, Introvert, Strong logical and abstract thinking

Honors and Awards

- Awarded the Outstanding Graduate of HuaZhong University of Science and Technology (*May 2019*)
- Awarded RenMin Scholarship for Self-motivated (*Sep 2018*)

Publications

1. Peng Yang, **Qi Yang**, Ke Tang, Xin Yao, Parallel Exploration via Negatively Correlated Search, Frontier of Computer Science, 2020. (SCI-indexed Journal, CCF C) (Poster presentation in ECOLE2021)
2. **Qi Yang**, Peng Yang, Ke Tang, Parallel Random Embedding with Negatively Correlated Search, In: proceeding of The Twelfth International Conference on Swarm Intelligence, Springer Press, 2021. (EI-indexed)

Projects

Research on Generalizable Reinforcement Learning Adviser:Ke Tang
Generalization; Reinforcement Learning; Active Learning; *Nov. 2020 - Jun. 2021*

- Designed an adversarial framework to selectively sampling (competitive performance in 50% training frames of SOTA.) (working paper for AAAI).
- Investigated about the RL generalization problem in detail and Reproduced 6 related state-of-arts works.

Research on Cooperative Co-evolution Algorithm in Reinforcement Learning Adviser:Ke Tang
Derivative-free Algorithm; Large-scale Optimization; Random Embedding; *Jul. 2019 – Jul. 2020*

- Developed a group of derivative-free RL optimization algorithms.
  - to alleviate the performance deterioration in million-scale problem(exceeds SOTA more than 40%).
  - to encourage parallel behavior exploration in multi-modal problem(score 2 to 3 times as many as SOTA).
- Contributed mainly to an open-source [NCS-RL repository]
- Wrote 2 SCI/EI indexed papers, technical reports (demand from Huawei) and applied 1 patent as 1^{st} author.

Other Potential and Social Activity

- President of Science Fiction Association of HUST (*May 2016 - May 2017*)
- Chairman of Science Fiction Association Union of Wuhan (*May 2016 - May 2017*)