

Licheng Luo

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EDUCATION

University of Virginia

Master of Science in Computer Science

Charlottesville, VA

August 2023 - Present

- GPA: 4.0
- Advisor: Shangtong Zhang

Huazhong University of Science & Technology

Honour Bachelor of Science in Electronic Engineering

Wuhan, Hubei

August 2019 - June 2023

- GPA: 3.78 with Outstanding Graduate Honour
- Advisor: Xin Yang

RESEARCH INTERESTS

Reinforcement Learning; Robust Reinforcement Learning; Bi-level Optimization & Analysis;

All kinds of Machine Learning Applications that benefit humans

Generally Speaking: Prove first, then implement; avoid random combinations

RESEARCH EXPERIENCE

Robust Markov Decision Processes with Transition Gradient Theorem

1/2024 – Present

Advised by Prof. Shangtong Zhang

Charlottesville, VA

- Proved the equivalence between finding the optimal adversary and finding the optimal policy in a regular MDP
- Proved the belman contraction of the optimal adversary, which shows the generated adversary will be converge to a fixed points
- Show the Markov optimality of this two player problem
- Propose the transition gradient theorem through which we can get the transition that minimizes the culmulated rewards

Reinforcement Learning with non-human feedback

11/2023 – 3/2024

Advised by Prof Chen-Yu Wei

Charlottesville, VA

- Designed a predefined reward model to take place of reward model in RLHF
- Implemented this idea by TRL framework
- You can find Report [*here*](#), the similar idea was published by DeepMind Reseach, you can find their work [*here*](#)

Volunteer Position w/ Supervisor and Hours

9/2023 – 12/2023

Company/Organization Name

123 Volunteer Rd., Town, ST

Supervisor: Mr. Volunteer Person (123-456-7890, may/may not contact)

Hours per week: 5

- List your Duties, Accomplishments, and Related Skills

PUBLICATIONS & WORKING MANUSCRIPTS

Name, Your, Co-author, Your. 2023. *Title of Your Illustrious Professional Publication Here*. Journal Name Here, 123, 45

Name, Your, Co-author, Your, Other Co-author, Your, et al. 2023. *Other Title of Publication Here*. Other Journal Name Here, 678, 90

HONORS & COMPETITION

Organization Name: Affiliation/Role

Another Organization Name: Affiliation/Role

SKILLS

Enter job-related honors, awards, leadership activities, skills (such as computer software proficiency or typing speed) or any other information requested by a specific job announcement.