

Shuwei Wang

MSc. student, Artificial Intelligence

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Education

- 24–on **PhD. in Computing Science**, University of Alberta, Edmonton, Canada
- 22–24 **MSc. in Computing Science**, University of Alberta, Edmonton, Canada, GPA: 3.8/4.0
- 18–22 **B.Sc. in Computing Science**, University of Alberta, Edmonton, Canada, GPA: 3.7/4.0

Awards

- 25 2024–25 Department of Computing Science Recruitment Award
- 21 Dean's Honor Roll

Experience

- 22–on **Teaching Assistant**, Department of Computing Science, University of Alberta
- 21–22 **Research Assistant**, Vadim Bulitko, Department of Computing Science, University of Alberta

Research Interest

Reinforcement learning, program synthesis, Explainability and Interpretability, combinatorial search, heuristic search, machine learning and multi-agent systems.

Programming Skills

Languages: MATLAB, Python, C++/C
Software: PyTorch, JAX, Tensorflow, MATLAB coder, LaTeX

Publications

- 2024 **Shuwei Wang**. *Explaining and Improving Formula-Represented Heuristic Functions in Grid Pathfinding*. MSc. Thesis.
- 2024 **Shuwei Wang** and Vadim Bulitko and William Yeoh. *Explaining Synthesized Pathfinding Heuristics via Iterative Visualization and Modification*. In proceedings of the IEEE Conference on Games (CoG), pages 4.
- 2023 **Shuwei Wang** and Vadim Bulitko and Taoan Huang and Sven Koenig and Roni Stern. *Synthesizing Priority Planning Formulae for Multi-Agent Pathfinding*. In proceedings of the AAAI Conference on Artificial Intelligence and Interactive Digital Entertainment (AIIDE), pages 9.
- 2022 Vadim Bulitko and **Shuwei Wang** and Justin Stevens and Levi HS Lelis. *Portability and Explainability of Synthesized Formula-based Heuristics*. In proceedings of the Symposium on Combinatorial Search (SoCS), pages 9.

Reviewing

- 25 **PC member**, Conference on Games (CoG) Auxiliary Track
- 25 **PC member**, European Conference on Artificial Intelligence (ECAI)
- 24 **PC member**, Conference on Games (CoG) Auxiliary Track
- 23 **PC member**, Plan, Activity, and Intent Recognition Workshop (PAIR)