

Majid Abdolshah, Ph.D.

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EDUCATION

- **Deakin University** VIC, Australia
Ph.D. in Computer Science (Machine Learning) May 2017 – Dec. 2019
- **University of Tehran** Tehran, Iran
M.Sc. in Computer Science (Knowledge Engineering) Sep. 2013 – Jul. 2016
- **Amirkabir University of Technology** Tehran, Iran
B.Sc. in Computer Science Sep. 2009 – Sep. 2013

RESEARCH INTERESTS

- Deep Reinforcement Learning
- Interpretable Deep Generative Models
- Bayesian Optimisation and Gaussian Processes

RESEARCH/WORK EXPERIENCE

- **Deakin University** VIC, Australia
Associate Research Fellow Jan. 2020 - Present
- **Deakin University** VIC, Australia
Research Assistant May 2017 - Dec. 2019
- **University of Tehran** Tehran, Iran
Research Assistant Oct. 2013 - Aug. 2016

HONORS

- **Global Talent Program:** Awarded Distinguished Talent Visa (permanent residency) in Australia.
- **Deep|Bayes Summer School:** Recipient of travel grant to attend Deep|Bayes 2019 in Moscow.
- **Deakin University:** Recipient of Deakin University Postgraduate Research Scholarship (DUPR) for graduate students.
- **University of Tehran:** Ranked 1st in class of 12, GPA: 3.8/4.
- **Stack Exchange Network:** Top 16% overall of Stack Exchange academic community.

PROGRAMMING SKILLS

- **Languages:** Python, C++, C, JavaScript, MATLAB, R, SQL.
- **Environments:** Qt, Hadoop, Power BI, CodeBlocks, Midnight Commander, Vim.
- **Technologies and Packages:** Linux BASH Programming, Spearmint, GPyOpt, TensorFlow, Keras, OpenCV, Scikit-learn, ROS, PoppyHumanoid.

PROFESSIONAL ACADEMIC SERVICES

- **Reviewer:** International Conference on Neural Information Processing (ICONIP).
International Conference on Pattern Recognition (ICPR).
International Conference on Machine Learning (ICML).
Conference on Neural Information Processing Systems (NeurIPS).
Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD).
- **Program Committee:** Thirty-Fifth AAAI Conference on Artificial Intelligence (AAAI-21).
- **Assistant Organiser:** Organising Data Analysis, Visualisation and Programming Meetup in Melbourne with a focus on the importance of artificial intelligence for industries in Melbourne.
- **Volunteer:** YOW! 2020 conference, Melbourne.
Currently volunteering at ICML 2021.

TEACHING EXPERIENCE

- **Deakin University** VIC, Australia
Teaching Assistantship: *SIT720-Machine Learning* Jul. 2018 - Nov. 2018
- **University of Tehran** Tehran, Iran
Teaching Assistantship: *Stochastic Processes* Spring 2015
- **University of Tehran** Tehran, Iran
Teaching Assistantship: *Statistical Learning* Fall 2015
- **University of Tehran** Tehran, Iran
Teaching Assistantship: *Information Retrieval and Machine Learning* Fall 2015

SELECTED PUBLICATIONS

- **M. Abdolshah**, S. Gupta, S. Rana, H. Le, T. K. George, S. Venkatesh. *A New Representation of Successor Features for Transfer across Dissimilar Environments*, **Accepted for oral presentation in ICML 2021**.
- T. K. George, H. Le, **M. Abdolshah**, S. Rana, S. Gupta, T. Tran, S. Venkatesh *Balanced Q-learning: Combining the Influence of Optimistic and Pessimistic Targets*, **under review in NeurIPS 2021**.
- H. Le, **M. Abdolshah**, T. K. George, T. Tran, S. Venkatesh *Model-Based Episodic Memory Induces Dynamic Hybrid Controls*, **under review in NeurIPS 2021**.
- H. Le, **M. Abdolshah**, T. K. George, D. Nguyen, K. Do, S. Venkatesh *Episodic Policy Optimization*, **under review in NeurIPS 2021**.
- **M. Abdolshah**, S. Rana, S. Gupta, H. Le, T. K. George, S. Venkatesh. *Plug and Play Reinforcement Learning*, **under review, 2020**.
- **M. Abdolshah**, A. Shilton, S. Rana, S. Gupta, S. Venkatesh. *Cost-Aware Multi-Objective Bayesian Optimisation*, **arXiv preprint, under review, 2019-2020**.
- **M. Abdolshah**, A. Shilton, S. Rana, S. Gupta, S. Venkatesh. *Multi-Objective Bayesian Optimisation with Preferences Over Objectives*, **In Advances in Neural Information Processing Systems (NeurIPS), pp. 12214-12224, 2019**.
- A. Shilton, S. Gupta, S. Rana, S. Venkatesh, **M. Abdolshah**, D. Nguyen. *Stable Bayesian Optimisation via Direct Stability Quantification*, **arXiv preprint, 2019**.
- S. Abdolshah, M. Abdolshah, **M. Abdolshah**, S. Vahid Hashemi. *Walking Control of Humanoid Robots on Uneven Ground Using Fuzzy Algorithm*, **Rapid Automation: Concepts, Methodologies, Tools, and Applications, pp. 352-361, 2019**.

- M. Abdolshah, A. Shilton, S. Rana, S. Gupta, S. Venkatesh. *Expected Hypervolume Improvement with Constraints (EHVIC)*, In **24th International Conference on Pattern Recognition (ICPR)**, pp. **3238-3243**, oral presentation, **2018**.
- M. Abdolshah, M. Teimouri, R. Rahmani. *Classification of X-Ray Images of Shipping Containers*, **Expert Systems with Applications**, Vol. **77**, pp. **57-65**, **2017**.
- M. Ebrahimi, M. Abdolshah, S. Abdolshah. *Developing a Computer Vision Method Based on AHP and Feature Ranking for Ores Type Detection*, **Applied Soft Computing**, Vol. **49**, pp. **179-188**, **2016**.
- S. Abdolshah, M. Abdolshah, S. Tang. *Trajectory Planning and Walking Pattern Generation of Humanoid Robot Motion*, **International Journal of Robotics and Automation (IJRA)**, Vol. **4**, pp. **135-142**, **2015**.

REFERENCES

Available upon request.