Omid Mohamad Nezami

Research Interests

My main research interest centres on deep learning, natural language processing, computer vision and robotics. My current focus is on deep learning models (e.g., Seq2Seq, Faster R-CNN) of controlled image captioning to incorporate particular additional information.

Education

2016– **PhD Candidate in Computer Science**, *Macquarie University*, Sydney, Australia. Scholarships: International Macquarie University Research Excellence Scholarship (iMQRES) and CSIRO's Data61 Top-Up Scholarship.

2008–2011 **M.Sc. in Computer Engineering**, *Azad University*, Qazvin, Iran. Scholarship: Mechatronics Research Laboratory (MRL) Scholarship.

2004–2008 **B.Sc. in Computer Engineering**, *Azad University*, Qazvin, Iran. Scholarship: Mechatronics Research Laboratory (MRL) Scholarship.

Publications

Omid Mohamad Nezami, Mark Dras, Stephen Wan, Cécile Paris, and Len Hamey. Towards Generating Stylized Image Captions via Adversarial Training. In *Pacific Rim International Conference on Artificial Intelligence*, pages 270–284. Springer, 2019.

Omid Mohamad Nezami, Mark Dras, Len Hamey, Deborah Richards, Stephen Wan, and Cécile Paris. Automatic Recognition of Student Engagement using Deep Learning and Facial Expression. In *Joint European Conference on Machine Learning and Knowledge Discovery in Databases*. Springer, 2019.

Omid Mohamad Nezami, Paria Jamshid Lou, and Mansoureh Karami. ShEMO: A Large-Scale Validated Database for Persian Speech Emotion Detection. *Language Resources and Evaluation*, 53(1):1–16, 2019.

Omid Mohamad Nezami, Mark Dras, Peter Anderson, and Len Hamey. Face-Cap: Image Captioning using Facial Expression Analysis. In *Joint European Conference on Machine Learning and Knowledge Discovery in Databases*, pages 226–240. Springer, 2018.

Omid Mohamad Nezami, Deborah Richards, and Len Hamey. Semi-Supervised Detection of Student Engagement. In *Pacific-Asia Conference on Information Systems*, 2017.

Anvar Bahrampour and Omid Mohamad Nezami. Diversity Guided Particle Swarm Optimization Algorithm Based on Search Space Awareness Particle Dispersion (DGPSO). In *Proceedings of the World Congress in Computer Science, Computer Engineering and Applied Computing (WorldComp)*, 2013.

Macquarie University, NSW, 2109, Australia \square +61 (420) 770 643 • \square omid.mohamad-nezami@hdr.mq.edu.au \square omidmnezami.github.io/

Omid Mohamad Nezami, Anvar Bahrampour, and Paria Jamshid Lou. Dynamic Diversity Enhancement in Particle Swarm Optimization (DDEPSO) Algorithm for Preventing from Premature Convergence. *Procedia Computer Science*, 24:54–65, 2013.

Omid Mohamad Nezami and Anvar Bahrampour. Particle Swarm Optimization algorithm Based on Diversified Artificial Particles (PSO-DAP). In *Proceedings of the Iranian Conference on Intelligent Systems*, 2013.

Omid Mohamad Nezami and Mohammad Reza Meybodi. Biped Robot Walking using a Combination of Truncated Fourier Series and GALA. In *Proceedings of International Conference on Machine Learning and Computing*, pages 442–447, 2011.

Nima Shafii, Siavash Aslani, Omid Mohamad Nezami, and Saeed Shiry. Evolution of Biped Walking using Truncated Fourier Series and Particle Swarm Optimization. In *Proceedings of Robot Soccer World Cup*, pages 344–354. Springer, 2009.

Nima Shafii, Siavash Aslani, Sayed Javadi, Vahid Azizi, and Omid Mohamad Nezami. Robust Humanoid Walking using Truncated Fourier Series Gait Generator. In *Proceedings of Robot Soccer Iran Open*, 2009.

Awards

- 2018 Awarded Macquarie University Postgraduate Research Fund (PGRF). Sydney, Australia.
- 2018 Awarded CSIRO's Data61 Top-Up Scholarship. Sydney, Australia.
- 2017 Awarded for the Best Industry Poster. Macquarie University, Sydney, Australia.
- 2016 Awarded International Macquarie University Research Excellence Scholarship (iMQRES). Sydney, Australia.
- 2010 3rd Place in RoboCup in the Mixed Reality League. Singapore.
- 2010 1st Place in RoboCup Iran Open in the Mixed Reality League. Tehran, Iran.
- 2010 1st Place in RoboCup Iran Open-Technical Challenge. Tehran, Iran.
- 2009 4th Place in RoboCup in the Mixed Reality League. Graz, Austria.
- 2009 1st Place in RoboCup Iran Open in the Mixed Reality League. Qazvin, Iran.
- 2008 Awarded Mechatronics Research Laboratory (MRL) Scholarship. Qazvin, Iran.
- 2008 1st Place in RoboCup in the 3D Soccer Simulation League. Suzhou, China.
- 2004 Awarded Undergraduate Mechatronics Research Laboratory (MRL) Scholarship. Qazvin, Iran.

Experience

- 2020 Reviewer of the AAAI Conference on Artificial Intelligence. New York, USA.
- 2019 Reviewer of the Conference on Empirical Methods in Natural Language Processing (EMNLP). Hong Kong, China.
- 2019 Research Scientist at Telstra and WallSync. Sydney, Australia.
- 2018–2019 Research Assistant at Macquarie University. Sydney, Australia.
- 2017-2019 Lecturer at Macquarie University. Sydney, Australia.
- 2011-2016 Lecturer and Research Scientist at Azad University. Iran.
- 2011-2014 Technical Committee Member of RoboCup. Iran.
- 2008–2011 Research Scientist at Mechatronics Research Laboratory (MRL). Iran.
- 2006–2008 Software Developer at Mechatronics Research Laboratory (MRL). Iran.

Languages

English Fluent

Persian Native

References

Principle Supervisor

Prof. Mark Dras

Dept. of Computing, Macquarie University, Sydney, NSW, Australia

mark.dras@mq.edu.au

Associate Supervisor

Dr. Len Hamey

Dept. of Computing, Macquarie University, Sydney, NSW, Australia len.hamey@mq.edu.au

External Supervisor

Dr. Stephen Wan

CSIRO's Data61, Sydney, NSW, Australia

stephen.wan@data61.csiro.au