**IIIS Research Impact Awards 2016**

**Staff/Impact Narrative/AI**

- Tie 1st and 2nd Kewen Wang and Zhe Wang $250 each
- Alan Liew $100
- Special Mentions: Mohammad Awrangjeb

**Staff/Impact Narrative/General**

- Amir Ghapanchi $300
- Fuwen Yang $200
- Ljubo Vlacic $100
- Special Mention: CEARM Centre for Enterprise Architecture Research and Management

**Staff/Publication/AI**

- As Post-Doctoral Research Fellow with IIIS 2 journal papers published in AI. The selected publication was successful in the top journal for logic and Philosophy. Zhiqiang Zhuang, Maurice Pagnucco, Yan Zhang, Inter-definability of Horn Contraction and Revision, Accepted for publication at Journal of Philosophical Logic (2016). [A*] $300

**Staff/Publication/General**


**IIIS HDR Supervision Award 2015-2016 Ljubo Vlacic $600**

• Seyedali Mirjalili $300 6 journal articles in Robust Optimisation, he proposed a set of novel test functions to benchmark robust algorithms effectively and a set of performance metrics to quantify the performance of robust algorithms. Little test functions were available and no performance measures in the literature, he has found and filled these significant gaps. In most of his work, he has developed algorithms, improved the current algorithms to better solve problems, and solved a variety of real-world problems. His contributions have been significant as most of his works have been widely used and cited.

• Abhijit Das $200 Research in the area of pattern recognition and machine intelligence, specifically biometrics and document analysis. He is collaborating with national and international leading labs on biometrics, with companies such as Microsoft, Samsung and Sony interested in his work on mobile Biometrics.

• Md Masbaul Alam Polash $100 Solving combinatorial optimisation problems (COP) through dynamic and static pruning to curtail the search space and enhance the performance of search algorithms.

Student/Impact Narrative/General

• Tahami Alahmadi $300 University website accessibility for students with disabilities, vision and hearing impairments. The solution will reduce effort and time students spend on websites, through evaluation they have identified correlation between accessibility of the learning materials and webpage content. It proposed solutions to enhance student satisfaction and ensure content quality will benefit all students.

• Tie 2nd and 3rd Jessica Korte, $150 Creation of a design method for designing with young deaf children. Impact is allowing designers access to technology to work with young deaf children to address needs, combatting delayed language acquisition.

• Bader Alghamdi $150 Working with E-government in Saudi Arabia to discover key practices to manage Service Orientated Architecture.

Student/Publication/AI


• S. Mirjalili, S. Saremi, S. M. Mirjalili, L. Coelho, Multi-objective grey wolf optimizer: A novel algorithm for multi-criterion optimization, Expert Systems with Applications, in press, DOI: 10.1016/j.eswa.2015.10.039 (IF=2.9) $100
• Xugang Ren “Exploiting Vertex Relationships in Subgraph Isomorphism in Large Graphs” in the prestigious VLDB conference, in September 2015. The VLDB conference is one of the two best database conferences, along with SIGMOD. The paper proposed an approach to speed-up subgraph isomorphism search which can be used to speed-up all backtracking-based algorithms. $300


PhD thesis award for student:

Abhijit Das. His thesis studies how to incorporate the liveness and adaptiveness in a single biometric system for identification. He applied multimodal ocular trait (iris and sclera) to enhance exploration of features and information fusion. Such real time biometric security systems are expected to be applied widely for border security and immigration decision-making. $600