# Kathryn Merrick

List of Publications by Year
in descending order



| 58 | 645 | 933264 10 | 752573 20 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 58 | 58 | 58 | 607 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Hierarchical Deep Reinforcement Learning for Continuous Action Control. IEEE Transactions on Neural Networks and Learning Systems, 2018, 29, 5174-5184. | 7.2 | 117 |
| 2 | Motivated Reinforcement Learning. , 2009, , . | | 59 |
| 3 | Electroencephalographic Workload Indicators During Teleoperation of an Unmanned Aerial Vehicle Shepherding a Swarm of Unmanned Ground Vehicles in Contested Environments. Frontiers in Neuroscience, 2020, 14, 40. | 1.4 | 49 |
| 4 | Trusted Autonomy and Cognitive Cyber Symbiosis: Open Challenges. Cognitive Computation, 2016, 8, 385-408. | 3.6 | 48 |
| 5 | Motivated reinforcement learning for non-player characters in persistent computer game worlds. , 2006, , . | | 37 |
| 6 | Multi-Task Deep Reinforcement Learning for Continuous Action Control. , 2017, , . | | 29 |
| 7 | Value systems for developmental cognitive robotics: A survey. Cognitive Systems Research, 2017, 41, 38-55. | 1.9 | 26 |
| 8 | A Survey of Game Theoretic Approaches to Modelling Decision-Making in Information Warfare Scenarios. Future Internet, 2016, 8, 34. | 2.4 | 24 |
| 9 | A Review of Theoretical and Practical Challenges of Trusted Autonomy in Big Data. IEEE Access, 2016, 4, 2808-2830. | 2.6 | 22 |
| 10 | Application of chaos measures to a simplified boids flocking model. Swarm Intelligence, 2015, 9, 23-41. | 1.3 | 18 |
| 11 | Modeling motivation for adaptive nonplayer characters in dynamic computer game worlds. Computers in Entertainment, 2008, 5, 1-32. | 1.2 | 16 |
| 12 | Motivated Learning from Interesting Events: Adaptive, Multitask Learning Agents for Complex Environments. Adaptive Behavior, 2009, 17, 7-27. | 1.1 | 16 |
| 13 | An Efficient Differential Evolution Algorithm for Solving 0â€“1 Knapsack Problems. , 2018, , . | | 12 |
| 14 | A Deep Hierarchical Reinforcement Learner for Aerial Shepherding of Ground Swarms. Lecture Notes in Computer Science, 2019, , 658-669. | 1.0 | 12 |
| 15 | Reduct based ensemble of learning classifier system for real-valued classification problems. , 2013, , . | | 10 |
| 16 | Intrinsically motivated particle swarm optimisation applied to task allocation for workplace hazard detection. Adaptive Behavior, 2016, 24, 219-236. | 1.1 | 10 |
| 17 | The Role of Implicit Motives in Strategic Decision-Making: Computational Models of Motivated Learning and the Evolution of Motivated Agents. Games, 2015, 6, 604-636. | 0.4 | 8 |
| 18 | A Review of the Relationship between Novelty, Intrinsic Motivation and Reinforcement Learning. Paladyn, 2017, 8, 58-69. | 1.9 | 8 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Swarm Q-Learning With Knowledge Sharing Within Environments for Formation Control. , 2018, , . | | 8 |
| 20 | Agents for multidisciplinary design in virtual worlds. Artificial Intelligence for Engineering Design, Analysis and Manufacturing: AIEDAM, 2007, 21, 267-277. | 0.7 | 7 |
| 21 | Performance analysis of rough set ensemble of learning classifier systems with differential evolution based rule discovery. Evolutionary Intelligence, 2013, 6, 109-126. | 2.3 | 7 |
| 22 | Automatic synthesis of swarm behavioural rules from their atomic components. , 2018, , . | | 7 |
| 23 | On the channel density of EEG signals for reliable biometric recognition. Pattern Recognition Letters, 2021, 147, 134-141. | 2.6 | 7 |
| 24 | Toward Computational Motivation for Multi-Agent Systems and Swarms. Frontiers in Robotics and AI, 2018, 5, 134. | 2.0 | 6 |
| 25 | Weekly Seasonal Player Population Patterns in Online Games: A Time Series Clustering Approach. , 2019, , . | | 6 |
| 26 | An online evolutionary rule learning algorithm with incremental attribute discretization. , 2014, , . | | 5 |
| 27 | Toward Electroencephalographic Profiling of Player Motivation: A Survey. IEEE Transactions on Cognitive and Developmental Systems, 2018, 10, 499-513. | 2.6 | 5 |
| 28 | Intrinsic Rewards for Maintenance, Approach, Avoidance, and Achievement Goal Types. Frontiers in Neurorobotics, 2018, 12, 63. | 1.6 | 5 |
| 29 | Autonomous recommender system for reconnaissance tasks using a swarm of UAVs and asynchronous shepherding. Human-Intelligent Systems Integration, 2021, 3, 175-186. | 1.2 | 5 |
| 30 | Experience-Based Generation of Maintenance and Achievement Goals on a Mobile Robot. Paladyn, 2016, 7, . | 1.9 | 4 |
| 31 | On Taxonomy and Evaluation of Feature Selectionâ€Based Learning Classifier System Ensemble Approaches for Data Mining Problems. Computational Intelligence, 2017, 33, 554-578. | 2.1 | 4 |
| 32 | Perceptron-Learning for Scalable and Transparent Dynamic Formation in Swarm-on-Swarm Shepherding. , 2020, , . | | 4 |
| 33 | Assessing Player Profiles of Achievement, Affiliation, and Power Motivation Using Electroencephalography. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2022, 52, 3648-3658. | 5.9 | 4 |
| 34 | New Designs of k-means Clustering and Crossover Operator for Solving Traveling Salesman Problems using Evolutionary Algorithms. , 2019, , . | | 4 |
| 35 | Evolving Robust Policy Coverage Sets in Multi-Objective Markov Decision Processes Through Intrinsically Motivated Self-Play. Frontiers in Neurorobotics, 2018, 12, 65. | 1.6 | 3 |
| 36 | Quantifying Swarming Behaviour. Lecture Notes in Computer Science, 2016, , 119-130. | 1.0 | 3 |

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|---|---|---|---|
| 37 | Detecting Rare Visual and Auditory Events from EEG Using Pairwise-Comparison Neural Networks. Lecture Notes in Computer Science, 2016, , 90-101. | 1.0 | 3 |
| 38 | Agent Models for Self-Motivated Home-Assistant Bots. AIP Conference Proceedings, 2010, , . | 0.3 | 2 |
| 39 | Investigating Differential Evolution based rule discovery in learning classifier systems. , 2013, , . | | 2 |
| 40 | Evolution of intrinsic motives in a multi-player common pool resource game. , 2014, , . | | 2 |
| 41 | Task Allocation Using Particle Swarm Optimisation and Anomaly Detection to Generate a Dynamic Fitness Function. Lecture Notes in Computer Science, 2015, , 317-329. | 1.0 | 2 |
| 42 | Differential Evolution Algorithm for Multiple Inter-dependent Components Traveling Thief Problem. , 2020, , . | | 2 |
| 43 | Open-Ended Continuous Learning of Compound Goals. IEEE Transactions on Cognitive and Developmental Systems, 2021, 13, 274-285. | 2.6 | 2 |
| 44 | Intrinsically Motivated Hierarchical Policy Learning in Multiobjective Markov Decision Processes. IEEE Transactions on Cognitive and Developmental Systems, 2021, 13, 262-273. | 2.6 | 2 |
| 45 | Exploiting abstractions for grammarâ€based learning of complex multiâ€agent behaviours. International Journal of Intelligent Systems, 2021, 36, 6273-6311. | 3.3 | 2 |
| 46 | A novel trust architecture integrating differentiated trust and response strategies for a team of agents. International Journal of Intelligent Systems, 2021, 36, 7017-7052. | 3.3 | 2 |
| 47 | Analysis and Prediction of Player Population Changes in Digital Games During the COVID-19 Pandemic. Lecture Notes in Computer Science, 2020, , 458-469. | 1.0 | 2 |
| 48 | Grammarâ€based autonomous discovery of abstractions for evolution of complex multiâ€agent behaviours. Swarm and Evolutionary Computation, 2022, 73, 101106. | 4.5 | 2 |
| 49 | Self-motivated learning of achievement and maintenance tasks for non-player characters in computer games. , 2014, , . | | 1 |
| 50 | Using game theory with intrinsic motivation to examine anti-hacking policies for autonomous systems. , 2016, , . | | 1 |
| 51 | Designing artificial agents to detect the motive profile of users in virtual worlds and games. , 2016, , . | | 1 |
| 52 | Curriculum optimisation via evolutionary computation, for a neural learner robust to categorical adversarial samples. , 2017, , . | | 1 |
| 53 | Intrinsically Motivated Agent Behavior in a Swarm. , 2018, , . | | 1 |
| 54 | A hierarchical pea-based anomaly detection model. , 2013, , . | | 0 |

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|---|---|---|---|
| 55 | Computational Motivation, Autonomy and Trustworthiness: Can We Have It All?. Studies in Systems, Decision and Control, 2018, , 293-316. | 0.8 | 0 |
| 56 | Modelling Behaviour Cycles for Life-Long Learning in Motivated Agents. Lecture Notes in Computer Science, 2008, , 1-10. | 1.0 | 0 |
| 57 | A â€˜Breadcrumbsâ€™ Model for Controlling an Intrinsically Motivated Swarm Using a Handheld Device. Lecture Notes in Computer Science, 2017, , 157-168. | 1.0 | 0 |
| 58 | Interaction-Based Trust Evaluation in a Team of Agents Using a Determination of Trust Model. , 2021, , . | | 0 |