# BenoÃ®t Girard

## List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/6280053/publications.pdf

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| 43 | 812 | 567281 | 552781 |
|---|---|---|---|
| papers | citations | 15 h-index | 26 g-index |

| 44 | 44 | 44 | 844 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Computational Model of the Transition from Novice to Expert Interaction Techniques. ACM Transactions on Computer-Human Interaction, 2023, 30, 1-33. | 5.7 | 2 |
| 2 | Basal Ganglia: Control of Saccades. , 2022, , 376-379. | | 0 |
| 3 | A biologically constrained spiking neural network model of the primate basal ganglia with overlapping pathways exhibits action selection. European Journal of Neuroscience, 2021, 53, 2254-2277. | 2.6 | 20 |
| 4 | Modeling awake hippocampal reactivations with model-based bidirectional search. Biological Cybernetics, 2020, 114, 231-248. | 1.3 | 12 |
| 5 | How to Reduce Computation Time While Sparing Performance During Robot Navigation? A Neuro-Inspired Architecture for Autonomous Shifting Between Model-Based and Model-Free Learning. Lecture Notes in Computer Science, 2020, , 68-79. | 1.3 | 7 |
| 6 | When Artificial Intelligence and Computational Neuroscience Meet. , 2020, , 303-335. | | 2 |
| 7 | Impacts of inter-trial interval duration on a computational model of sign-tracking vs. goal-tracking behaviour. Psychopharmacology, 2019, 236, 2373-2388. | 3.1 | 6 |
| 8 | Dopamine blockade impairs the exploration-exploitation trade-off in rats. Scientific Reports, 2019, 9, 6770. | 3.3 | 54 |
| 9 | Basal Ganglia: Control of Saccades. , 2019, , 1-3. | | 0 |
| 10 | Adaptive coordination of working-memory and reinforcement learning in non-human primates performing a trial-and-error problem solving task. Behavioural Brain Research, 2018, 355, 76-89. | 2.2 | 9 |
| 11 | On-line fusion of trackers for single-object tracking. Pattern Recognition, 2018, 74, 459-473. | 8.1 | 24 |
| 12 | Sequential Action Selection and Active Sensing for Budgeted Localization in Robot Navigation. International Journal of Semantic Computing, 2018, 12, 109-127. | 0.5 | 1 |
| 13 | Hippocampal replays under the scrutiny of reinforcement learning models. Journal of Neurophysiology, 2018, 120, 2877-2896. | 1.8 | 32 |
| 14 | Toward Self-Aware Robots. Frontiers in Robotics and AI, 2018, 5, 88. | 3.2 | 35 |
| 15 | Prioritized Sweeping Neural DynaQ with Multiple Predecessors, and Hippocampal Replays. Lecture Notes in Computer Science, 2018, , 16-27. | 1.3 | 6 |
| 16 | A hippocampo-cerebellar centred network for the learning and execution of sequence-based navigation. Scientific Reports, 2017, 7, 17812. | 3.3 | 58 |
| 17 | Sustainable computational science: the ReScience initiative. PeerJ Computer Science, 2017, 3, e142. | 4.5 | 86 |
| 18 | Respective Advantages and Disadvantages of Model-based and Model-free Reinforcement Learning in a Robotics Neuro-inspired Cognitive Architecture. Procedia Computer Science, 2015, 71, 178-184. | 2.0 | 13 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Modeling choice and reaction time during arbitrary visuomotor learning through the coordination of adaptive working memory and reinforcement learning. Frontiers in Behavioral Neuroscience, 2015, 9, 225. | 2.0 | 44 |
| 20 | Motor Cost Influences Perceptual Decisions. PLoS ONE, 2015, 10, e0144841. | 2.5 | 38 |
| 21 | Which criteria for autonomously shifting between goal-directed and habitual behaviors in robots?. , 2015, , . | | 7 |
| 22 | Biomimetic race model of the loop between the superior colliculus and the basal ganglia: Subcortical selection of saccade targets. Neural Networks, 2015, 67, 54-73. | 5.9 | 6 |
| 23 | Saccade learning with concurrent cortical and subcortical basal ganglia loops. Frontiers in Computational Neuroscience, 2014, 8, 48. | 2.1 | 10 |
| 24 | A biologically constrained model of the whole basal ganglia addressing the paradoxes of connections and selection. Journal of Computational Neuroscience, 2014, 36, 445-468. | 1.0 | 25 |
| 25 | Design of a Control Architecture for Habit Learning in Robots. Lecture Notes in Computer Science, 2014, , 249-260. | 1.3 | 15 |
| 26 | Basal Ganglia: Control of Saccades. , 2014, , 1-4. | | 0 |
| 27 | Learning a sequence of motor responses to attain reward: a speed-accuracy trade-off. BMC Neuroscience, 2013, 14, . | 1.9 | 0 |
| 28 | Biomimetic stochastic race model in the subcortical saccadic selection processes: a model of the tecto-basal loops. BMC Neuroscience, 2013, 14, . | 1.9 | 0 |
| 29 | Neuro-inspired Navigation Strategies Shifting for Robots: Integration of a Multiple Landmark Taxon Strategy. Lecture Notes in Computer Science, 2012, , 62-73. | 1.3 | 4 |
| 30 | Maximum entropy perception-action space: a Bayesian model of eye movement selection. , 2011, , . | | 0 |
| 31 | Path planning versus cue responding: a bio-inspired model of switching between navigation strategies. Biological Cybernetics, 2010, 103, 299-317. | 1.3 | 45 |
| 32 | Importing the computational neuroscience toolbox into neuro-evolution-application to basal ganglia. , 2010, , . | | 10 |
| 33 | An Integrated Neuromimetic Model of the Saccadic Eye Movements for the Psikharpax Robot. Lecture Notes in Computer Science, 2010, , 114-125. | 1.3 | 5 |
| 34 | Analyzing Interactions between Cue-Guided and Place-Based Navigation with a Computational Model of Action Selection: Influence of Sensory Cues and Training. Lecture Notes in Computer Science, 2010, , 335-346. | 1.3 | 3 |
| 35 | Multi-objective Evolutionary Algorithms to Investigate Neurocomputational Issues: The Case Study of Basal Ganglia Models. Lecture Notes in Computer Science, 2010, , 597-606. | 1.3 | 2 |
| 36 | Bayesian models of eye movement selection with retinotopic maps. Biological Cybernetics, 2009, 100, 203-214. | 1.3 | 9 |

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|---|---|---|---|
| 37 | Analyzing Interactions between Navigation Strategies Using a Computational Model of Action Selection. Lecture Notes in Computer Science, 2008, , 71-86. | 1.3 | 8 |
| 38 | Geometry of the superior colliculus mapping and efficient oculomotor computation. Biological Cybernetics, 2007, 97, 279-292. | 1.3 | 33 |
| 39 | The Psikharpax project: towards building an artificial rat. Robotics and Autonomous Systems, 2005, 50, 211-223. | 5.1 | 68 |
| 40 | Integration of Navigation and Action Selection Functionalities in a Computational Model of Cortico-Basal-Gangliaâ€“Thalamo-Cortical Loops. Adaptive Behavior, 2005, 13, 115-130. | 1.9 | 22 |
| 41 | Actorâ€“Critic Models of Reinforcement Learning in the Basal Ganglia: From Natural to Artificial Rats. Adaptive Behavior, 2005, 13, 131-148. | 1.9 | 54 |
| 42 | A BASAL GANGLIA INSPIRED MODEL OF ACTION SELECTION EVALUATED IN A ROBOTIC SURVIVAL TASK. Journal of Integrative Neuroscience, 2003, 02, 179-200. | 1.7 | 31 |
| 43 | Model-Based and Model-Free Replay Mechanisms for Reinforcement Learning in Neurorobotics. Frontiers in Neurorobotics, 0, 16, . | 2.8 | 2 |