

# 1 Primary studies

**Table 1:** Primary studies

ID	Title	Author	Year
PS1	Coalitional Negotiation Games with Emergent Communication [1]	Xiaoyang Gao, Siqu Chen, Lin Jie, Yang Yang, Haiying Wu, and Jianye Hao.	2022
PS2	Deep Learnable Strategy Templates for Multi-Issue Bilateral Negotiation [2]	Pallavi Bagga, Nicola Paoletti, and Kostas Stathis.	2022
PS3	Deep reinforcement learning with emergent communication for coalitional negotiation games [3]	Siqu Chen, Yang Yang, and Ran Su.	2022
PS4	A Bayesian Policy Reuse Approach for Bilateral Negotiation Games [4]	Xiaoyang Gao, Siqu Chen, Qisong Sun, Yan Zheng, and Jianye Hao.	2022
PS5	Distributed Emergent Agreements with Deep Reinforcement Learning [5]	Kyrril Schmid, Robert Müller, Lenz Belzner, Johannes Tochtermann, and Claudia Linhoff-Popien.	2021
PS6	An Autonomous Negotiating Agent Framework with Reinforcement Learning based Strategies and Adaptive Strategy Switching Mechanism [6]	Ayan Sengupta, Yasser Mohammad, and Shinji Nakadai.	2021
PS7	Convergence of probabilistic automatic negotiation: mutual maximum likelihood estimation [7]	Koji Tsumura	2021
PS8	A context-aware approach to automated negotiation using reinforcement learning [8]	Dan E Kröhling, Omar JA Chiotti, and Ernesto C Martínez	2021
PS9	Exploring Monte Carlo Negotiation Search with Nontrivial Agreements [9]	Elijah Alden Malaby and John Licato.	2021
PS10	A deep reinforcement learning-based agent for negotiation with multiple communication channels [10]	Xiaoyang Gao, Siqu Chen, Yan Zheng, and Jianye Hao	2021
PS11	Detecting and Learning Against Unknown Opponents for Automated Negotiations [11]	Leling Wu, Siqu Chen, Xiaoyang Gao, Yan Zheng, and Jianye Hao.	2021
PS12	A Bilevel Game Model for Ascertaining Competitive Target Prices for a Buyer in Negotiation with Multiple Suppliers [12]	Akhilesh Kumar, Anjana Gupta, and Aparna Mehra	2021
PS13	A Supervised Topic Model Approach to Learning Effective Styles within Human-Agent Negotiation [13]	Yuyu Xu, David Jeong, Pedro Sequeira, Jonathan Gratch, Javed Aslam, and Stacy Marsella.	2020
PS14	Modeling Opponent Strategy in Multi-Issue Bilateral Automated Negotiation Using Machine Learning [14]	Fatemeh Mohammadi Ashnani, Zahra Movahedi, and Kazim Fouladi.	2020
PS15	Negotiating team formation using deep reinforcement learning [15]	Yoram Bachrach, Richard Everett, Edward Hughes, Angeliki Lazaridou, Joel Z Leibo, Marc Lanctot, Michael Johanson, Wojciech M Czarnecki, and Thore Graepel.	2020
PS16	A hybrid concession mechanism for negotiating software agents in competitive environments [16]	Khalid Mansour	2020
PS17	Agent-based cloud service negotiation architecture using similarity grouping approach [17]	Rajkumar Rajavel, Sathish Kumar Ravichandran, and GR Kanagachidambaresan.	2020
PS18	Deep reinforcement learning for acceptance strategy in bilateral negotiations [18]	Yousef Razeghi, Celal Ozan Berk Yavuz, and Reyhan Aydoğan.	2020

PS19	RLBOA: A Modular Reinforcement Learning Framework for Autonomous Negotiating Agents [19]	Jasper Bakker, Aron Hammond, Daan Bloembergen, and Tim Baarslag.	2019
PS20	Argumentation-based Negotiation with Incomplete Opponent Profiles [20]	Yannis Dimopoulos, Jean-Guy Mailly, and Pavlos Moraitis.	2019
PS21	MCTS-based Automated Negotiation Agent [21]	Cédric LR Buron, Zahia Guessoum, and Sylvain Ductor.	2019
PS22	Numerical Abstract Persuasion Argumentation for Expressing Concurrent Multi-Agent Negotiations [22]	Ryuta Arisaka and Takayuki Ito.	2019
PS23	Meta-Strategy for Multi-Time Negotiation: A Multi-Armed Bandit Approach [23]	Ryohei Kawata and Katsuhide Fujita.	2019
PS24	Automated Negotiation with Gaussian Process-based Utility Models [24]	Haralambie Leahu, Michael Kaisers, and Tim Baarslag.	2019
PS25	Negotiation Strategies for Agents with Ordinal Preferences [25]	Sefi Erlich, Noam Hazon, and Sarit Kraus.	2018
PS26	One-to-Many Multi-agent Negotiation and Coordination Mechanisms to Manage User Satisfaction [26]	Amro Najjar, Yazan Mualla, Kamal Singh, and Gauthier Picard.	2018
PS27	Automated Negotiations Under User Preference Uncertainty: A Linear Programming Approach [27]	Dimitrios Tsimpoukis, Tim Baarslag, Michael Kaisers, and Nikolaos G Pat- erakis.	2018
PS28	A systematic model of stable multi-lateral automated negotiation in e-market environment [28]	Taiguang Gao, Min Huang, Qing Wang, Mingqiang Yin, Wai Ki Ching, Loo Hay Lee, and Xingwei Wang.	2018
PS29	A multi-demand negotiation model based on fuzzy rules elicited via psychological experiments [29]	Jieyu Zhan, Xudong Luo, Cong Feng, and Minghua He.	2018
PS30	Emergent Communication through Negotiation [30]	Kris Cao, Angeliki Lazaridou, Marc Lanctot, Joel Z Leibo, Karl Tuyls, and Stephen Clark.	2018
PS31	Concurrent bilateral negotiation for open e-markets: the CONAN strategy [31]	Bedour Alrayes, Özgür Kafalı, and Kostas Stathis.	2018
PS32	The Value of Information in Automated Negotiation: A Decision Model for Eliciting User Preferences [32]	Tim Baarslag and Michael Kaisers.	2017
PS33	POPPONENT: Highly accurate, individually and socially efficient opponent preference model in bilateral multi issue negotiations [33]	Farhad Zafari and Faria Nassiri-Mofakham.	2017
PS34	Designing an intelligent decision support system for effective negotiation pricing: A systematic and learning approach [34]	Xin Fu, Xiao-Jun Zeng, Xin Robert Luo, Di Wang, Di Xu, and Qing-Liang Fan.	2017
PS35	Human-computer negotiation in a three player market setting [35]	Galit Haim, Bo An, Sarit Kraus, et al.	2017
PS36	An Automated Negotiation Agent for Permission Management [36]	Tim Baarslag, Alan Alper, Richard Gomer, Muddasser Alam, Perera Charith, Enrico Gerding, et al.	2017
PS37	Algorithm selection in bilateral negotiation [37]	Litan Ilany and Ya'akov Gal.	2016
PS38	An Agent Architecture for Concurrent Bilateral Negotiations [38]	Bedour Alrayes and Kostas Stathis.	2013
PS39	Complex and Concurrent Negotiations for Multiple Interrelated e-Markets [39]	Kwang Mong Sim.	2012
PS40	Using Gaussian Processes to Optimise Concession in Complex Negotiations against Unknown Opponents [40]	Colin Richard Williams, Valentin Robu, Enrico Harm Gerding, and Nicholas Robert Jennings.	2011

PS41	Automated Negotiation with Decommitment for Dynamic Resource Allocation in Cloud Computing [41]	Bo An, Victor Lesser, David Irwin, and Michael Zink.	2010
PS42	A Multilateral Negotiation Model for Cloud Service Market [42]	Dongjin Yoo and Kwang Mong Sim.	2010
PS43	An Opponent's Negotiation Behavior Model to Facilitate Buyer-seller Negotiations in Supply Chain Management [43]	Fang Fang, Ye Xin, Xia Yun, and Xu Haitao.	2008
PS44	Opponent Modelling in Automated Multi-Issue Negotiation Using Bayesian Learning [44]	Koen Hindriks and Dmytro Tykhonov.	2008
PS45	A fuzzy constraint based model for bilateral, multi-issue negotiations in semi-competitive environments [45]	Xudong Luo, Nicholas R Jennings, Nigel Shadbolt, Hofung Leung, and Jimmy Ho-man Lee	2003
PS46	Optimal Negotiation Strategies for Agents with Incomplete Information [46]	S Shaheen Fatima, Michael Wooldridge, and Nicholas R Jennings.	2001
PS47	On Fuzzy E-Negotiation Agents: Autonomous Negotiation with Incomplete and Imprecise Information [47]	Ryszard Kowalczyk and Van Bui.	2000
PS48 (a)	Strategic Negotiations for Extensive-Form Games [48]	Dave De Jonge and Dongmo Zhang.	2020
PS48 (b)	Automated Negotiations for General Game Playing [49]	Dave De Jonge and Dongmo Zhang.	2017
PS49 (a)	A Deep Reinforcement Learning Approach to Concurrent Bilateral Negotiation [50]	Pallavi Bagga, Nicola Paoletti, Bedour Alrayes, and Kostas Stathis.	2021
PS49 (b)	ANEGMA: an automated negotiation model for e-markets [51]	Pallavi Bagga, Nicola Paoletti, Bedour Alrayes, and Kostas Stathis.	2021
PS50 (a)	Decoupling Negotiating Agents to Explore the Space of Negotiation Strategies [52]	Tim Baarslag, Koen Hindriks, Mark Hendriks, Alexander Dirkzwager, and Catholijn Jonker.	2014
PS50 (b)	A Tit for Tat Negotiation Strategy for Real-Time Bilateral Negotiations [53]	Tim Baarslag, Koen Hindriks, and Catholijn Jonker.	2013

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