

CURRICULUM VITAE AND LIST OF PUBLICATIONS

• Personal Details

Name: Inon Zuckerman
Birth date: 5/10/77, Israel
Army service: 1996-2000 (Airforce, C-130 loadmaster)
Marital status: divorced + 3 kids
Office: Kiryat Hamada, Ariel, 40700, 03-9066325
Home: Hadar 19/19, Herzliya, Israel, 4632610, 058-5664422

• Education

B.A. – 2000-2003 – The Interdisciplinary Center – Dept. of Computer Science
M.A. - 2003-2005 - Katholieke Universiteit Leuven- Dept. of Computer Science
Prof. Mark Denecker
"Wolves and Rabbits: Using Answer Set Programming for Multi Agents Systems."
Ph.D. - 2005-2008 – Bar-Ilan University – Dept. of Computer Science
Prof. Sarit Kraus (BIU) and Prof. Jeffery S. Rosenchien (Hebrew U)
"Agent Models for Enhanced Interactions in Cooperative and Competitive Environments."

• Employment History (in reverse chronological order, including sabbatical leave)

(e) Department Head
2021 – (ongoing) Head of the Dept. of Industrial Engineering and Management – Ariel University.
(d) Senior Lecturer
2011 - Dept. of Industrial Engineering and Management – Ariel University, Ariel, Israel.
(c) Postdoc research associate
2009-2011 – Post doctoral research associate – University of Maryland's institute for Advanced Computer Studies, at College-Park, MD, USA.
(b) Adjunct Lecturer
2008-2009 – Dept. of CS, Applied Math. – Bar-Ilan University
(a) Teaching Assistant
2005-2007 – Dept. of CS, Dept. of Engineering – Bar-Ilan University

• **Professional Activities** (in reverse chronological order)

(e) Membership in professional/scientific societies

2009 - (Ongoing) – Association for Advancement of Artificial Intelligence.

2009 – (Ongoing) – Israeli Association of AI (committee member representing Ariel University)

• **Educational activities**

(a) Courses taught

Final Project course – Ariel University

Introduction to Artificial Intelligence – Master/B.A. – Ariel U.

Stochastic Models – B.A. – Ariel University

Multi agent systems – B.A. – Ariel University

Introduction to Programming – B.A. – Ariel University

Probability theory – B.A. Ariel University

Final projects – B.A. – Ariel University

Introduction to Computing – B.A. – Bar Ilan University

Object Oriented Programming – B.A. - Bar Ilan University

Introduction to Computer Sciences – B.A. – Bar Ilan University

(b) Current research students

2021 – Guy Burstain – Master student

2021 – Noam Ishai – Master student

(b) Past students

Dor Ezra Mizrahi – Ph.D.

Tal Shmueli – M.Sc.

• **Awards, Citations, Honors, Fellowships**

(a) Honors, Citation Awards (including during studies)

2020 – Social science and engineering interdisciplinary grant – 2 years.

2019 – Data science center 2 years grant.

2015 – 1st place in AAI-2015 computer poker championship.

2014 – 2nd place in ANAC-2014. The fourth international Negotiating Agents Competition (out of 21 groups from around the world)

2006 – Graduation magna cum laude – K.U.Leuven, ranked 3rd out of 127 students.

2004 – Belgium Ministry of Science – The Flemish Community Award.

2003 – Graduation cum laude – IDC, Herzliya, Israel.

2003 – Community service award – teaching mathematics to unprivileged high school students

(b) Fellowships (e.g. Fulbright)

2005 – Bar-Ilan University - \$10,000

President's scholarship to excellent Ph.D. candidates

**• Scientific Publications: (*) denotes a publication since last rank
(Google Scholar: h-index = 13, total citations = 519)**

Books Chapter

1. E. Erez, I. Zuckerman
2016
DoNA – a Domain-based Negotiation Agent
Fukuta, N., Ito, T., Zhang, M., Fujita, K., Robu, V. (Eds.) in "Recent Advances in Agent-based Complex Automated Negotiation"
Springer-Verlag, pages 261-271
Citations number - 3
2. I. Zuckerman, A. Rosenfeld, E. Segal-Halevi, S. Kraus
2015
First Steps in Chat-Based Negotiating Agents
Fujita, K., Ito, T., Zhang, M., Robu, V. (Eds.) in "Next Frontiers for Agent-based Complex Automated Negotiations"
Springer-Verlag, pages 89-109
Citations number – 4

Conference proceedings (highly referred)

1. D. Mizrahi, I. Zuckerman, I. Laufer
2023
Sensitivity of Electrophysiological Patterns in Level-K States as Function of Individual Coordination Ability.
Proceedings of SAI Intelligent Systems Conference, 336-347.
2. D. Mizrahi, I. Zuckerman, I. Laufer
2022
Analysis of Alpha Band Decomposition in Different Level-k Scenarios with Semantic Processing.
International Conference on Brain Informatics, 65-73.
3. D. Mizrahi, I. Laufer, I. Zuckerman
2022
Modeling and predicting individual tacit coordination ability.
Brain Informatics 9 (1), 1-14
Citation number - 3
4. D. Mizrahi, I. Laufer, I. Zuckerman
2021
The effect of expected revenue proportion and social value orientation index on players' behavior in divergent interest tacit coordination games.
International Conference on Brain Informatics, 25-34.
Citation number - 7
5. D. Mizrahi, I. Laufer, I. Zuckerman
2021

- Topographic analysis of cognitive load in tacit coordination games based on electrophysiological measurements.*
NeuroIS Retreat, 162-171.
Citation number - 10
6. D. Mizrahi, I. Laufer, I. Zuckerman
2020
The Effect of Individual Coordination Ability on Cognitive-Load in Tacit Coordination Games.
In Proc. of NeuroIS 2020, pages 244-252.
Citation number - 14
7. D. Mizrahi, I. Laufer, I. Zuckerman
2020
The Effect of Loss-Aversion on Strategic Behavior of Players in Divergent Interest Tacit Coordination Games.
In Proc. of Brain Informatics 2020, pages 41-49. (best student paper award)
Citation number - 11
8. D. Mizrahi, I. Laufer, I. Zuckerman
2019
Modeling Individual Tacit Coordination Abilities.
In Proc. of Brain Informatics 2019: 29-38.
Citation number – 11
9. D. Mizrahi, I. Laufer, I. Zuckerman, T. Zhang.
2018
The effect of culture and social orientation on Player's performances in tacit coordination games.
International Conference on Brain Informatics, 437-447.
Citation number - 15
10. T. Shmueli, I. Zuckerman
2015
Avoiding Game-tree Pathology in Multi-player Games
In Proc. of the 2015 IEEE/WIC/ACM International Conference on Web Intelligence and Intelligent Agent Technology (WI-IAT 2015), Singapore.
IEEE, pages 312-315.
Citation number - 3
11. K.L. Cheng, I. Zuckerman, D. S. Nau, and J. Golbeck
2014
Predicting Agents' Behavior by Measuring their Social Preferences
In Proc. 21st European Conference on Artificial Intelligence (ECAI 2014), Prague, Czech Republic, pages 985-986.
Citations number - 2
12. A. Rosenfeld, I. Zuckerman, S. Kraus, E. S. HaLevi
2014
NegoChat: A Chat-Based Negotiation Agent

- In Proc. of the 13th International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2014), Paris, France, pages 525-532.
Citations number - 65
13. M. Fenster, I. Zuckerman, S. Kraus.
2012
Guiding User Choice during Discussion by Silence, Examples and Justifications.
Raedt, Luc De and Bessière, Christian and Dubois, Didier and Doherty, Patrick and Frasconi, Paolo and Heintz, Fredrik and Lucas, Peter J. F. In Proc. 20th European Conference on Artificial Intelligence (ECAI 2012), Montpellier, France.
IOS press, pages 330-335.
Citations number - 10
14. B. Wilson, I. Zuckerman, A. Parker, D. S. Nau.
2012
Improving Local Decisions in Adversarial Search.
Raedt, Luc De and Bessière, Christian and Dubois, Didier and Doherty, Patrick and Frasconi, Paolo and Heintz, Fredrik and Lucas, Peter J. F. In Proc. 20th European Conference on Artificial Intelligence (ECAI 2012), Montpellier, France, IOS press, pages 840-845
Citations number - 9
15. K. L. Cheng, I. Zuckerman, D. S. Nau, J. Goldbeck.
2011
The Life Game: Cognitive Strategies for Repeated Stochastic Games.
In Proc. 2011 IEEE International Conference on Social Computing (SocialCom 2011), Boston, U.S.A.
IEEE, pages 95-102.
Citations number - 15
16. I. Zuckerman, M. Hadad.
2011
Reasoning about Groups: A Cognitive Model for the Social Behavior Spectrums.
In Proc. 2011 IEEE International Conference on Web Intelligence and Intelligent Agent Technology (IAT 2011), Lyon, France.
IEEE, pages 125-132.
Citations number - 4
17. M. Wooldridge, S. Kraus, I. Zuckerman and J. Grant.
2011
Manipulating Boolean Games through Communication.
In Proc. Of the 22nd International Joint Conference on Artificial Intelligence (IJCAI 2011), Barcelona, Spain.
AAAI press, pages 210-215.
Citations number - 39
18. B. Wilson, I. Zuckerman, D. S. Nau.
2011
Modeling Social Preferences in Adversarial Search.

- Liz Sonenberg and Peter Stone and Kagan Tumer and Pinar Yolum (editors) In Proc. The 10th International Joint Conference on Autonomous Agents and Multiagent Systems (AAMAS 2011), Taipei, Taiwan.
IFAAMAS, pages 337-344.
Citations number - 8
19. K. L. Cheng, I. Zuckerman, U. Kuter and D. S. Nau.
2010
Using a Social Orientation Model for the Evolution of Cooperative Societies.
In Proc. 2010 IEEE International Conference on Web Intelligence and Intelligent Agent Technology (IAT 2010), Toronto, Canada.
IEEE, pages 413-418.
Citations number - 1
20. I. Zuckerman, A. Felner and S. Kraus.
2009
Mixing Search Strategies for Multi-Player Games.
Craig Boutilier (editor) In Proc. 21st International Joint Conference on Artificial Intelligence (IJCAI 2009), Pasadena, California, USA.
AAAI press, pages 646-652.
Citations number - 17
21. I. Zuckerman, S. Kraus and J. S. Rosenchein.
2008
An Empirical Investigation of the Adversarial Activity Model.
Malik Ghallab and Constantine D. Spyropoulos and Nikos Fakotakis and Nikolaos M. Avouris (editors) In Proc. The 18th European Conference on Artificial Intelligence (ECAI 2008), Patras, Greece.
IOS press.
Citations number - 1
22. I. Zuckerman, S. Kraus, J. S. Rosenchein and G. A. Kaminka.
2007
An Adversarial Environment Model for Bounded Rational Agents in Zero-Sum Interactions.
Edmund H. Durfee and Makoto Yokoo and Michael N. Huhns and Onn Shehory (editors) In Proc. The 6th International Joint Conference on Autonomous Agents and Multiagent Systems (AAMAS 2007), Honolulu, Hawaii.
IFAAMAS, pages 83
Citations number - 11
23. I. Zuckerman, S. Kraus, J. S. Rosenchein.
2007
Using Focal Point Learning to Improve Tactic Coordination in Human-Machine Interactions.
Manuela M. Veloso (editor) In Proc. 20th International Joint Conference on Artificial Intelligence (IJCAI 2007), Hyderabad, India.
Pages 1563-1568

Refereed articles and refereed letters in scientific journals

1. D. Mizrahi, I. Zuckerman, I. Laufer
2022
Electrophysiological Features to Aid in the Construction of Predictive Models of Human-Agent Collaboration in Smart Environments.
Sensors 22 (17), 6526.
Impact factor - 3.847, citation numbers – 3
2. I. Zuckerman, D. Mizrahi, I. Laufer
2022
EEG Pattern Classification of Picking and Coordination Using Anonymous Random Walks.
Algorithms 15 (4), 114
Impact factor - 2.267, citation numbers – 6
3. I. Laufer, D. Mizrahi, I. Zuckerman
2022
An electrophysiological model for assessing cognitive load in tacit coordination games.
Sensors 22 (2), 477
Impact factor - 3.847, citation numbers – 6
4. D. Mizrahi, I. Zuckerman, I. Laufer
2021
Level-k classification from EEG signals using transfer learning.
Sensors 21 (23), 7908
Impact factor - 3.847, citation numbers - 7
5. D. Mizrahi, I. Laufer, I. Zuckerman.
2021
Predicting focal point solution in divergent interest tacit coordination games.
Journal of Experimental & Theoretical Artificial Intelligence, 1-21
Impact factor – 2.296, citation numbers - 7
6. D. Mizrahi, I. Laufer, I. Zuckerman
2021
Individual Strategic Profiles in Tacit Coordination Games
Journal of Experimental and Theoretical Artificial Intelligence 33(1), pages 63-78.
Impact factor - 2.039, citation numbers - 15
7. D. Mizrahi, I. Laufer, I. Zuckerman
2020
Collectivism-individualism: Strategic Behavior in Tacit Coordination Games.
Plos One 15(2): e0226929
Impact factor – 2.74, citation numbers - 16
8. D. Mizrahi, I. Zuckerman, I. Laufer
2020

- Using a Stochastic Agent Model to Optimize Performance in Divergent Interest Tacit Coordination Games*
Sensors, 20(24), 7026.
Impact factor – 3.275, citation numbers – 13
9. I. Zuckerman, B. Wilson, D.S. Nau.
2018
Avoiding Game-tree Pathology in Two Players Adversarial Search
Journal of Computational Intelligence, 34(2): 542-561.
Impact factor – 0.704, citation numbers – n/a
10. I. Zuckerman, K. L. Cheng , D. S. Nau.
2018
Modeling Agent's Preferences by its Designer's Social Value Orientation
Journal of Experimental & Theoretical Artificial Intelligence 30(2), 257-277
Impact factor – 2.039, citations number - 9
11. M. Leibovitch, I. Zuckerman, A. Pfeffer, Y. Gal
2017
Decision-making and Opinion Formation in Simple Networks
Journal of Knowledge and Information Systems. Volume 51, Issue 2, pages 691-718.
Impact factor – 1.702, citations number – 2
12. E. Erez, I. Zuckerman, D. Hermel
2017
Automatic Negotiation: Playing the Domain Instead of the Opponent
Journal of Experimental & Theoretical Artificial Intelligence. Volume 29, Issue 3, pages 597-616.
Impact factor – 1.703, citations number – 2
13. A. Rosenfeld, I. Zuckerman, E. Segal-Halevi, O. Drein, S. Kraus
2016
NegoChat-A: A Chat-Based Negotiation Agent with Bounded Rationality.
Journal of Autonomous Agents and Multiagent Systems. Volume 30, Number 1, pages 68-81
Impact factor – 1.417, citations number - 39
14. I. Zuckerman, M. Hadad
2015
A BDI-based agent architecture for social competent agents
Web Intelligence. Volume 13, Number 3, pages 179-194.
Impact factor – 0.63, Citations - 1
15. J. Grant, S. Kraus, M. Wooldridge, I. Zuckerman.
2014
Manipulating Games by Sharing Information
Studia Logica, Volume 102, Issue 2, pages 267-295
Impact factor – 0.724, citations number - 11
16. A. Rosenfeld, I. Zuckerman, A. Azaria, S. Kraus.
2012

- Combining Psychological Models with Machine Learning to Better Predict People's Decisions.*
Synthese. Volume 189, Supplement 1, pages 81-93, 2012.
Impact factor – 2.908, citations number - 64
17. I. Zuckerman, M. Hadad.
2012
The Social Landscape: Reasoning on the Social Behavior Spectrum.
IEEE Intelligent Systems. Volume 27, Number 2, pages 36-4.
Impact factor – 3.352, citations number - 0
18. I. Zuckerman, S. Kraus, J. S. Rosenchein.
2012
The Adversarial Activity Model for Bounded Rational Agents.
Journal of Autonomous Agents and Multi-Agent Systems. Volume 24, Issue 3, Pages 374-409.
Impact factor – 1.417, citations number - 13
19. I. Zuckerman, A. Felner.
2011
The MP-MIX algorithm: Dynamic Search Strategy Selection in Multi-Player Adversarial Search.
IEEE Transactions on Computational Intelligence and AI in Games, volume 3, issue 4, pages 316-331.
Impact factor – 1, citations number - 5
20. I. Zuckerman, S. Kraus, and J. S. Rosenschein.
2011
Using Focal Points to Improve Machine-Human Tacit Coordination.
Journal of Autonomous Agents and Multi-Agent Systems. Volume 22, Issue 2, Page 289-316.
Impact factor – 1.417, citations number - 17

Published scientific reports and technical papers

1. I. Zuckerman
2017
Examining the Connection Between Social Value Orientation and the Ability to Succeed in Tacit Coordination Games
The tenth International Conference for Brain Informatics (BI 2017), Beijing, China
2. I. Zuckerman, A. Rosenfeld, E. Segal-Halevi, S. Kraus
2013
Towards Automated Negotiation Agents that use Chat Interfaces.
The Sixth International Workshop on Agent-based Complex Automated Negotiations (ANAC 2013), Saint Paul, Minnesota, USA
Citations number - 10
3. K. L. Cheng, I. Zuckerman, U. Kuter and D. S. Nau.
2010
Evolving Cooperative Societies.
Martin Pelikan and Jurgen Branke (editors) The Late Breaking abstracts workshop, Genetic and Evolutionary Computation Conference (GECCO 2010), Portland, Oregon. ACM, pages 2067-2068.
4. K. L. Cheng, I. Zuckerman, U. Kuter and D. S. Nau.
2010
Emergence of Cooperative Societies in Evolutionary Games.
The Fourth Evolutionary Computation and Multi-Agent Systems and Simulation (ECoMASS 2010), Portland, Oregon. ACM, pages 1794-1800.
5. I. Zuckerman, S. Kraus and A. Felner.
2010
Mixing Search Strategies for Multi-Player Games. Laboratory for Computational Cross Cultural Dynamics (LCCD) poster presentation, Virginia, U.S.A, 2010.
6. I. Zuckerman.
2009
Agent Models for Enhanced Interactions in Cooperative and Competitive Environments. PhD thesis.
Computer Science Department, Bar-Ilan University.
7. I. Zuckerman.
2007
Agent Models in Cooperative and Competitive Environments.
Doctoral Mentoring Workshop at the Sixth International Joint Conference on Autonomous Agents and Multiagent Systems (AAMAS 2007) (Student Abstract).

(d) Seminar presentations at universities and institutions

1. 2017 Ben-Gurion University, Information Systems Seminar. (Israel)
2. 2015 Human-Agent-Robot Teamwork: Tools and Methods for Designers discussion workshop (Lorentz center, Netherlands)
3. 2014 Conference for Israeli Engineering Association. (Israel)

4. 2014 Ben-Gurion University, Information Systems Seminar. (Israel)
5. 2012 Symposium in Honor of Prof. Dana Nau (UMD, Maryland)
6. 2012 BIU Symposium on the Foundations of Artificial Intelligence (Ashkelon, Israel)
7. 2011 The Lorentz center (Netherlands)
8. 2011 The Institute for Human-Machine Cognition (Pensacola, Florida)
9. 2011 The Computer Science colloquium, The Interdisciplinary Center (Herzliya, Israel)
10. 2011 University of Maryland Computer Science colloquium (College-Park, Maryland)
11. 2011 Ben-Gurion University, Computer Science colloquium (Be'er Sheva, Israel)
12. 2011 Haifa University (Haifa, Israel).