

Ganit Richter

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Ed	UC	ati	on
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Ph.D. Information and Knowledge Management. University of Haifa. Advisors: Sheizaf Rafaeli and Daphne Raban.	2020
M.B.A. (<u>Thesis</u>) Information and Knowledge Management. University of Haifa. Advisors: Sheizaf Rafaeli and Daphne Raban.	
M.B.A. Non-Profit Organization. University of Haifa. <i>Cum Laude</i> .	2010
M.A. Pure Mathematics. University of Haifa. Advisor: Alexander Kozhevnikov.	1999
B.A. Mathematics and Fine Arts. University of Haifa.	1989

Academic Appointments

Lecturer. Technology Management and Information Systems. School of Business Administration, the College of Management Academic Studies (COLMAN). 2022-present

Post-Doctoral Scholar. Education in Science and Technology. The Technion – Israel Institute of Technology. 8/2020-2/2021

Studying the role of failure in games and how to design for it.

Adjunct Faculty. Digital Game Design (MDes), Azrieli Faculty of Design, Shenkar College of
Engineering. Design and Art.2021-present

Studying in-game networks and communities. Developing and teaching graduate level seminars.

Teaching Fellow B. Technology and Information Management, Coller School of Management.Tel Aviv University.2020-presentDeveloping and teaching courses on gamification and on technology and information

management.

Adjunct Faculty. Computer Engineering Program, and Electrical & Electronics EngineeringProgram, Faculty of Engineering; and Business Administration and the Program for Executives,Faculty of Economics & Business Administration. Ruppin Academic Center.2017- presentTeaching courses in mathematics. Developing and teaching courses on gamification.



Adjunct Faculty. School of Business Administration, and Department of Information and
Knowledge Management, Faculty of Management. University of Haifa.2011-presentStudying gamification in crowdsourcing to encourage users' contributions.
Developing and teaching courses on serious games, gamification, and business games.

Instructor. Israeli Air Force and Israeli Naval Academy Special Programs; and Department of Economics, Faculty of Social Sciences. University of Haifa. 1991-1994 *Teaching courses in mathematics.*

Part-time Teacher. Community Information Systems Program. Zefat Academic College.

2016-2020

Teaching courses in mathematics. Developing and teaching courses on gamification.

Academic Staff Member.MBA Program, and BA in Management & Economics Program,Department of Management and Economics.Open University of Israel1999 – 2016Teaching courses in mathematics.1999 – 2016

Professional Experience

Facilitator and Leading Instructor. Games for Executives Initiative, University of Haifa. 2010-2013

Facilitator. Serious Games for School ICT Leaders at the Ministry of Education, and for Information Managers at the Israel Ministry of Labor, Social Affairs and Social Services. 2016-2018

Games Developed

Designer, Manager, Initiator and Producer. Information behavior technology projects

- GUESS: A game for crowds designed for knowledge contribution. With Sheizaf Rafaeli and Daphne Raban University of Haifa, and the IBM Social Technologies Team. 2012-2014 Demonstration Video: <u>https://www.youtube.com/watch?v=hnbkOZsHZxI</u>
- DrupalGuess. A mobile application/game for crowds designed with a focus on timing of rewards. 2015-2017

Research Interests _

I study the design, use, and impact of gamification approaches and online serious games. I am especially interested in the managerial, educational, social, business, and political aspects of hedonic information systems. My research on games and gamification has three foci:1. mechanisms of rewards and incentives, and their motivational roles. 2. Characteristics of knowledge sharing and the balance between instrumental knowledge contributions and spam. 3. The use of gamification in novel contexts, such as interpretation of complex legal documents. In my work I use diverse methodologies such crowd computing, field studies, and experiments.

Teaching Experience _

Course design and instructor. Topics in Player Centered Design, Experience Economy and Networks (*Graduate level seminar*). Digital Game Design, Shenkar College of Engineering, Design and Art. 2021 – present

Course design and instructor. Video Games: A Case Study (*Graduate level seminar*). Digital Game Design, Shenkar College of Engineering, Design and Art. 2021 – present

Course design and instructor. Gamification as a Managerial Tool. (*Graduate -level course*). Coller School of Management, Tel Aviv University. (*Student evaluations: 5.89 out of 7*). 2020-present

Course design and instructor. Management of Technology and Information. (Graduate -level course). Coller School of Management, Tel Aviv University.2021-present

Course design and instructor. Introduction to Gamification. (*Undergraduate-level course*). Business Administration program, Ruppin Academic Center. (*Student evaluations: 4.8 out of 6*). 2017 – present

Instructor. Calculus. (*Undergraduate-level course*). Computer Engineering Program, Ruppin Academic Center. (*Student evaluations: 5.1 out of 6*). 2017 – present

Instructor. Calculus. (*Undergraduate-level course*). Electrical & Electronics Engineering Program, Ruppin Academic Center. (*Student evaluations: 5.1 out of 6*). 2017 – present

Instructor. Executive Business Game. (*Graduate -level course*). School of Business Administration, University of Haifa. (*Student evaluations: 5 out of 5*). 2011 – present

Course design and instructor. Serious Games for Enterprises. (Graduate -level course).Department of Information and Knowledge Management, University of Haifa. (Student
evaluations: 7 out of 7).2013-2020

Instructor. Information Economics. (*Graduate -level course*). Department of Information and Knowledge Management. With Prof. Daphne Raban. University of Haifa. 2018- present

Instructor. Calculus. (*Undergraduate-level course*). Department of Economics, University of Haifa. 1991-1994

Instructor. Linear Algebra and Advanced Calculus. (Undergraduate-level course).Department of Economics, University of Haifa.1991-1994

Instructor. Calculus, Linear Algebra and Ordinary Differential equations. (*Undergraduate-level course*). Special Programs: IAF Flight Course; Israeli Naval Academy, University of Haifa. 1992-1994



Instructor. Mathematics. (Undergraduate-level course). Preparatory Program for Economics Students, University of Haifa. Summer1993, Summer 1994

Instructor. Calculus. (*Undergraduate-level course*). Community Information Systems Program, Zefat Academic College. (*Student evaluations: 6.42 out of 7*). 2016, 2018, 2020

Instructor. Logic and Set Theory. (*Undergraduate-level course*). Community Information Systems Program, Zefat Academic College. (*Student evaluations: 6.76 out of 7*). 2018-2019

Course design and instructor. Introduction to Gamification. (*Undergraduate-level course*). Community Information Systems Program, Zefat Academic College. (*Student evaluations: 6.8 out of 7*). 2017, 2019

Instructor. Mathematics for MBA Students. (*Graduate -level course*). MBA Program, Open University of Israel. 1999-2016

Instructor. Linear Algebra for MBA Students. (*Graduate -level course*). MBA Program, Open University of Israel. 1999-2016

Instructor. Mathematics for Students of Social Sciences: Set Theory, Logic and Linear Algebra. (*Undergraduate-level course*). Department of Management and Economics, Open University of Israel. 1999-2016

Instructor. Mathematics Refresher Workshop for Social Science Students. (*Undergraduate-level course*). Department of Management and Economics, Open University of Israel. 1999-2016

Instructor. Calculus for Students of Economics and Management. (*Undergraduate-level course*). Department of Management and Economics, Open University of Israel. 1999-2016

Academic Honors and Awards

Best Paper award.

The Israel Association for Information Systems Conference, Tel Aviv University.	2019
Mediterranean Conference on Information Systems MCIS. Guimaraes, Portugal.	2012
Israeli Information Science Conference, Acre	2012

Prizes.

Future Digileaders, outstanding early career researcher, KTH Royal Institute Sweden	e of Technology, 2021
ILAIS Prize for Outstanding Research, Israel Association for Information S	-
	2019
Trump Foundation: Prize for research on PISA test. 10000 NIS.	2018



Belkine Prize: Awarded for contributing to the unique understanding of the competitive	
intelligence field. 5000 NIS.	2018
Dean's Prize for outstanding research excellence, University of Haifa. 2000 NIS.	2014

Scholarships.

The Center for Internet Research. University of Haifa. 5000 NIS.	2018
Faculty of Management, University of Haifa. 5000 NIS.	2018
Article-Publication Grant, The Graduate Studies Authority, University of Haifa. 700 NIS	2018
LINKS Scholarship, the ISF Center for Research Excellence. 180000 NIS. 201	4-2018
Tuition scholarships, Graduate Studies Authority, University of Haifa. (awarded for six semesters). 201	4-2017
The Israel Internet Association. 5000 NIS.	2014
Special Grant for Publication a Scholarly Article, The Graduate Studies Authority, Unive Haifa. 700 NIS.	rsity of 2014
Researchers' Budget Scholarship, University of Haifa. 26,200 NIS.	2012
The Graduate Studies Authority, University of Haifa. 8000 NIS	2008

Grant awarded to Participate in a Workshop or a Conference.

KTH Royal Institute of Technology, Stockholm, Sweden. Sponsored by Digital Futures. 2022

University of Minnesota, Twin Cities. Sponsored by the US National Science Foundation. Grant awarded to participate in an interdisciplinary workshop entitled, "Game-based Assessment: An Interdisciplinary Workshop Integrating Organizations, Education, and Assessment". *\$ 2750 (only 24 grants have been awarded, most of them around \$500).* 2019

University of Oxford e-Research Centre: Fellowship to attend the "Crowd-sourced Research in the Humanities Conference and Workshop". £ 800 (only 5 grants were awarded outside the UK). 2018

Conferences Participation Grant, Advanced Studies Authority, University of Haifa. 2400 NIS. 2018

Conferences Participation Grant, Faculty of Management, University of Haifa. 7500 NIS. 2018

Research Grants _____

Learning from Past Initiatives to Improve Science Education in Israel and Promote Excellence. Funded by the Israel Academy of Sciences and Humanities (15,000 NIS). Co-Investigator with Daphne Raban. 2016



Gamification for Well-Being Among Elders and Senior Citizens.Joy Annual AcademicGrant for a Post-doctoral Fellowship.Under review (2nd phase)

Publications

Google Scholar profile: Ganit Richter - Google Scholar

Theses.

- 1. Scoring Mechanism Experiments in Gamification of Crowd-Sourced Knowledge Elicitation. 122 pages, English, University of Haifa. PhD Thesis.
- 2. Schedules of Reinforcement and Game Experience. Master's Thesis.
- 3. On the Spectrum of the Operator $div \Delta_0^{-1} grad$ in domain of spherical layer. Master's Thesis.

Articles in Refereed Journals.

 Nahmias, Y., Ken-Dror Feldman, D., Richter, G., Raban, D. R. (2021). Games of Terms. *Vermont Law Review*, 45(3), 387-436. Ranked 11.70 according to W&L Law Journal Rankings for 2019

Book Chapters.

5. Richter, G., Raban, D. R., & Rafaeli, S. (2015). Studying gamification: The effect of rewards and incentives on motivation. In T. Reiners and L.C. Wood (Eds.), *Gamification in education and business* (pp. 21-46). New York: Springer. Citations (Google Scholar as of Sep 15, 2022) = 470.

Refereed full-paper conference presentations.

- Richter, G., Raban, D. R., & and Rafaeli, S. (2019). Gamifying Crowdsourced Contributions: The Impact of The Scoring Mechanism Design on Players' Behavior in a Game Designed for Pooling Knowledge- Encouraging Quantity and Quality Contributions. *Proceedings of the 2019 Technology, Mind and Society Conference* (TMS 2019) (pp. 48-49). Washington, DC, USA.
- Richter, G., Raban, D. R., & and Rafaeli, S. (2019). Re-playing and quality contribution: The role of the score mechanism design as motivator. In R. Ratan, B. Winn & E. LaPensee (Eds.), *Proceedings of Meaningful Play 2018* (pp. 237-250). Pittsburgh: Carnegie Mellon University: ETC Press.
- Richter, G., Raban, D. R., & and Rafaeli, S. (2018). Tailoring a Points Scoring Mechanism for Crowd-Based Knowledge Pooling. *Proceedings of the 51st Hawaii International Conference on System Sciences* (HICSS-51), (pp. 1128-1137). Big Island, Hawaii, Shidler College of Business, University of Hawaii at Manoa.
- Richter, G., Raban, D. R. and Rafaeli, S. (2014). The effect of different score systems on player performance. In Y. Yair & E. Shmueli (Eds.), *Proceedings of the 12th Annual Conference of MEITAL* (pp. 306-312). Levinsky College of Education, Tel-Aviv.

- Richter, G., Raban, D. R. & Rafaeli, S. (2014). Using common gamification elements to enhance knowledge sharing: The effect of score keeping function on player performance. *The* 2nd Israeli Human-Computer Interaction Research Conference (IsraHCI), (pp. 1-8). IBM Research Lab, Haifa.
- Richter, G., & Raban, D. (2012). Schedules of reinforcement and game experience. *Proceedings of the Seventh Mediterranean Conference on Information Systems MCIS 2012* (pp. 1-12). Guimaraes, Portugal. (Selected for the Best Paper Award).

Refereed Short-paper conference presentations.

- 12. **Richter, G**., Raban, D. R., & and Rafaeli, S. (2021). Play to the Crowd: Fostering knowledge contribution with scoring mechanism Design. *Proceedings of the ACM Collective Intelligence conference 2021*. Copenhagen Business School.
- 13. **Richter, G.**, Raban, D. R., & and Rafaeli, S. (2019). Gamification in crowdsourcing: encouraging quantity and quality contributions. *Proceedings of the 13th ILAIS Conference*. Coller School of Management, Tel Aviv University. (Selected for the Best Paper Award.)
- 14. **Richter, G.,** Raban, D. R., & and Rafaeli, S. (2018). Scoring Points in Crowd-Based Knowledge- Pooling Games. Paper presented at the *Free Speech in the Age of Algorithms Conference*. University of Haifa Center for Law & Technology, Haifa.
- 15. **Richter, G**. (2018). Know your crowd: A study on gamification in crowdsourcing to encourage user contributions. Presented at the DHOxSS, Oxford, UK, University of Oxford e-Research Centre.
- 16. Zlotnik, S., Weissbrem-Padan, D., **Richter, G.,** Weiss, P., Marcus, S. (2017). Implementing elements of collaborative learning and gamification in an academic occupational therapy program. AOTA Annual Conference & Expo: Centennial Celebration. Philadelphia.
- 17. **Richter, G.**, Raban, D. R. (2016). Changes in Math and Sciences Curricula, Learning and Teaching in Israel. Presented at the *Symposium: Learning from past initiatives to improve science education in Israel*. The Israel National Academy of Sciences, Jerusalem.
- 18. **Richter, G.**, Raban, D. R., & and Rafaeli, S. (2014). Score keeping function in a knowledge sharing game. *The 22nd European Conference on Information Systems* (ECIS), Tel-Aviv.
- 19. **Richter, G.,** Raban, D. R. and Rafaeli, S. (2014). The mathematics of knowledge sharing gamification. *MEITAL Gamification Conference*, Tel Aviv.
- 20. Raban, D. R. & **Richter, G**. (2012). Knowledge sharing enhanced by a game. *Israeli Conference on Information Science 2012*, Western Galilee College, Acre. (**Selected for the Best Paper Award**).
- Raban, D. R. & Richter, G. (2011). Harnessing the power of games to enhance organizational knowledge sharing. In N. Geri & Y. Kalman (Eds), *Proceedings of The 5th ILAIS Conference*, (pp. 73-77). Ra'anana, Open University of Israel.



22. Raban, D. R. & **Richter, G.** (2011). On the connection between trivia games and business glossaries. Annual Conference for Information Studies, Bar-Ilan University.

Conference workshops

23. **Richter, G.** (2015). Gamification Technology and Learning in Action Groups. Ben-Gurion University of the Negev (2-day symposium; 2015)

Submitted

- 24. **Richter, G**., Raban, D. R., & and Rafaeli, S.. The mathematics behind gamification of knowledge contribution by crowds. Submitted to Expert Systems with Application.
- 25. **Richter, G.**, Raban, D. R., Ken-Dror Feldman, D., Nahmias, Y.. "The Tou Game": Building Bridges between Service Agreements and Public Perceptions. <u>Accepted</u> to ILAIS.
- 26. **Richter, G**., Roll, I.. Failing Up: Game mechanisms that facilitate challenges to promote persistence, experience, and learning.
- 27. **Richter, G.**, Roll, I.(2022). Investigating Failure Mechanisms in Digital Games: How Can Such Designs Impact E-Learning Environments? <u>Accepted</u> to 53rd annual international conference of the International Simulation and Gaming Association (ISAGA), Boston MA.
- 28. Shapira Attiach, Y., **Richter, G**. (2022). Designing a serious game to promote awareness to the emotional needs of healthy siblings. Submitted to IEEE- IMET.
- 29. Shapira Attiach, Y., **Richter, G**. (2022). Project NLI365 library's cultural assets. Cultural treasures grant proposal.
- Shapira Attiach, Y., Richter, G., Pnueli, V., Perez, M. (2022). Game design promotes awareness: Healthy vs. vulnerable siblings. <u>Accepted</u> to MP2022. Michigan State University in East Lansing, Michigan.
- 31. Yogev, G., Shitrit, Y., Gvili, G., Maron, M., **Richter, G.**, Gluzman, R. (2022). Yonos- MAKE YOUR CHOICE. <u>Accepted</u> to MP2022. Michigan State University in East Lansing, Michigan.

Reports

- 32. Ken-Dror Feldman, D., Richter, G., Birnhack, M., Dunkelman, O., Nahon, K., Rechavi, A., Shadmy, T., Tabansky, L., Kagan, D., Klinger, J., Shikmoni, D. (2018). The power and rights of the virtual citizen in the virtual and global world of 9B people. Israel's Innovation Summit 2018, Peres Center for Peace and Innovation. (7 pages Hebrew and English).
- 33. **Richter**, **G**. (2018). Digital Games: An opportunity for learning. What can we learn from PISA data on the situating of video games in classrooms? The Trump Foundation, Israel (38 pages, Hebrew).
- 34. **Richter**, **G**., Raban, D. (2017). Changes in mathematics and science curricula and in the knowledge about their learning and instruction in Israel in light of developments around the world regarding knowledge about learning and the view of the teacher's and the education system's role. *Insights from Past initiatives to Promote Science Education in Israel: Learning*



from Selected Issues (87 pages Hebrew). Full version: http://education.academy.ac.il/SystemFiles/23033.pdf

Invited Guest Lectures _____

- Gamification and the No-Reading Problem- Tel- Aviv University Faculty of Law, Law and Technology Workshop (2019) (with Prof. Raban).
- Designing Algorithms University of Haifa, The Center for Cyber Law & Policy (2018).
- Games are Serious Business Zefat Academic College, Community Informatics Department (2018).
- Gamifying Crowdsourced Contributions The Israeli CI Forum (FIMAT), Tel Aviv (2018).
- Think Like a Game Designer- the Israel Ministry of Labor, Social Affairs and Social Services, Tel Aviv (2018).
- Information Games-When Information and Research Blend -Israel Knowledge Management Forum Annual Conference, Tel Aviv (2017).
- Insights from Scientific Review: Changes in Mathematics and Sciences Curricula and in the Knowledge about their Learning and Instruction in view of the Teachers and Their Role in Science Education Reforms -Invited speaker in the symposium, "Learning from Past Initiatives to Improve Science Education in Israel", in Ramat Rachel, Jerusalem (2016).
- Games, Serios Games and Gamification- Israel Ministry of Education, Tel Aviv (2016).
- Serious Games and Gamification- guest lecturer for an advanced course in University of Haifa Technologies in Education Graduate Program, Department of Learning, Instruction and Teacher Education (2014, 2015).
- Gamification- invited speaker at The Center for Educational Technology (2014).
- Gamification in the Classroom: What, How, Why? Ruppin Academic Center workshop (2014).
- Score Keeping Functions in Online CBSG (Crowd Based Serious Games)-IBM Haifa Research Lab seminar (2011).

Academic Service

Research Center Affiliations

The Center for Internet Research (University of Haifa).

Learning in a Networked Society (LINKS ISF) Center of Research Excellence (University of Haifa).

Games for Executives Initiative (University of Haifa).

Learning Analytics, Learning Design Lab (The Technion – Israel Institute of Technology).

Game Lab (Shenkar College of Engineering, Design and Art).

Journal Reviewing.

European Journal of Information Systems, EJIS (2016, 2017).

Journal of Learning Analytics, JLA (2020).

ACM Transactions on Social Computing, TSC (2020).



IEEE Transactions on Learning Technologies, TLT (2017).

Conferences. Program Committee Co-Chair.

Serious Games Symposium and Workshop. University of Haifa & The Davidson Institute of Science Education (Weizmann Institute of Science) (2-day conference). 2012.

Conference Reviewing

Annual conference of the Association of Internet Researchers AoIR (2021, 2022)

Annual international conference of the International Simulation and Gaming Association ISAGA (2022)

International Conference on Information Systems ICIS (2020).

The Hawai'i International Conference on System Sciences HICSS (2019, 2020, 2022).

Technology, Mind and Society TMS (2019).

International Conference on User Modeling, Adaptation and Personalization ACM UMAP (2019).

Conference on Human Factors in Computing Systems ACM-CHI (2011, 2012).

Membership in Professional Associations.

European Society for Socially Embedded Technologies (EUSSET).

European Social Simulation Association (ESSA), SIG for Social Simulation and Games.

Association of Internet Researchers: AoIR

Israel Association for Information Systems (ILAIS)

International Society for the Learning Sciences

Non-Academic Community Contributions

- Raban, D., & Richter, G. (2011). Playing games at work. *Galileo*, 154, 56-57. (Hebrew)
- Volunteer consultant at the Zevulun Education Forum topics include the integration of ICT in schools and knowledge creation (2019).
- Led a "Serious Games" workshop for School ICT Leaders at the Ministry of Education (2016).
- Deliver lectures to school children, seniors, and government official about serious games and gamification (2013-Present).
- Deliver lectures and led workshop in Teldan Information conference (2013).
- LINKS website committee
- Deliver lecture and workshop to information managers about serious games and gamification (2017).
- Facilitator and lecturer. Games and gamification, European Researchers' Night, University of Haifa 2013-2017



- Prof. Sheizaf Rafaeli, President of Shenkar College of Engineering. Design and Art; Director of the Center for Internet Research (University of Haifa); Co-PI and member of the Academic Management of the ICORE LINKS Center of Excellence for research on Learning in the Age of Information; and a Senior Research Fellow (The Samuel Neaman Institute for National policy research, The Technion – Israel Institute of Technology). Email: <u>sheizaf@rafaeli.net</u>.
- Prof. Daphne Raban, the Center for Internet Research; the Caesarea-Rothschild Center for Interdisciplinary Applications of Computer Science; LINKS, I-CORE Center of Research Excellence on Learning in a Networked Society (Faculty of Management, University of Haifa); and Academic Head of the Younes and Soraya Nazarian Library (University of Haifa). Email: <u>draban@univ.haifa.ac.il</u>.
- Prof. Gilad Ravid, Information System Group, Industrial Engineering and Management Department, Ben Gurion University of the Negev. Email: <u>gilad@ravid.org.</u>
- Prof. Ido Roll, Learning Analytics, Learning Design Lab, Faculty of Education in Science and Technology, The Technion Israel Institute of Technology. Email: <u>roll@technion.ac.il</u>.
- Prof. Yael Kali, Director of the Taking Citizen Science to School (TCSS) research center, and of the Learning in the Networked Society (LINKS) I-CORE. Email: <u>yael.kali@edtech.haifa.ac.il</u>