NOA RAGONIS
Associate Professor

Beit Berl College

Curriculum Vita and List of Publications

May 2026

1. Personal Details

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A. Undergraduate and graduate studies

Period of study	Name of institution and department	Degree acquired	Year of degree approval
1997–2004	Weizmann Institute of Science, Rehovot, Israel Department of Science Teaching Thesis topic: Teaching Object–Oriented Programming to High School Novices	Ph.D.	2005
1994–1997	Weizmann Institute of Science, Rehovot, Israel Department of Science Teaching Thesis topic: Introduction to Expert Systems–Development and Evaluation of a Computer Science Curriculum	M.Sc.	1997
1981–1984	Bar Ilan University, Ramat–Gan, Israel Faculty of Exact Sciences, Computer Science and Mathematics track Summa cum laude	B.Sc.	1984

B. Postdoctoral position

2006–2007	Technion–Israel Institute of Technology, Haifa, Israel Faculty of Education in Technology and Science Research topic: Development and evaluation of a disciplinary–pedagogy tutoring model for computer science prospective teachers	2007

	Recipient of research scholarship from the Israeli Council for Higher Education	

C. Teaching diploma and license

Year of Approval	Diploma	Name of Institution	Period of Study
1987	Teaching License in Computer Science for Secondary Schools	Israel Ministry of Education	1986
1984	Teaching Diploma in Computer Science Magna cum laude	Bar Ilan University, Ramat–Gan, Israel	1983–1984

2. Ranks and Tenure in Institutions of Higher Education

Dates	Name of institution and department	Rank
2026	The Council of higher Education, Israel	Associate Professor
2011	Beit Berl College	Senior Lecturer
2008	Beit Berl College	Tenured Lecturer
2007	Technion – Israel Institute of Technology	Senior Lecturer (part–time)
1997	Beit Berl College	Teacher

From here on, (*) indicates positions since receiving the rank of senior lecturer (2011)

3. Offices and Positions in Academic Administration

Dates	Name of Institution	Program/Committee	Position
(*) 2025	Beit Berl College	Developing Team and Head of teaching certificate program in Computer Systems Technologies	Head
(*) 2024	Beit Berl College	Developing Team of B.Ed. in Data Analytics	Member
(*) 2021	Beit Berl College	Developing Team of teaching certificate program in Data Analytics	Head
(*) 2021–to date	Beit Berl College	M.Ed. in Interdisciplinary STEM Education	Head
(*) 2019–2021	Beit Berl College	M.Teach. for Secondary Education	Head
(*) 2015–2020	Beit Berl College	Developing Team of M.Ed. in Interdisciplinary STEM Education	Head

Dates	Name of Institution	Program/Committee	Position
(*) 2015–2018	Beit Berl College	Erasmus+ project: TeachEx–Teaching Excellence in Israel	Project Head
(*) 2012–2018	Beit Berl College	The Center for Teaching Enhancement	Founder and Head
2008–2018	Beit Berl College	The College Academic Council	Member
2013–2019	Beit Berl College	Faculty Council	Member
2008–to date	Beit Berl College	The Committee of Studying English for Academic Purposes	Chair
2008–2012	Beit Berl College	The Curriculum Committee, School of Education	Chair
2008–2012	Beit Berl College	School of Education	Deputy Head
2015; 2006	Beit Berl College	Committees for Determining Principles and Rules for Online Courses	Chair
1999–2008	Beit Berl College	Computer Science Department, Faculty of Education	Head

4. Scholarly Positions and Activities Outside Academic Institutions

A. Academic review

A.1. Reviewing for international peer–reviewed academic journals and conferences

- Journals: The ACM Transactions on Computing Education (TOCE), Journal on Educational Resources in Computing, ACM Inroads–Educational research in advancing computing, IOI–Olympiads in Informatics Journal, Journal of Studies in Educational Evaluation, Mentoring & Tutoring: Partnership in Learning, Education Sciences, Computers & Education, Computers
- Conferences: ITiCSE–Conference on Innovation and Technology in Computer Science Education, SIGCSE The ACM Technical Symposium on Computer Science Education, ISSEP–Informatics in Schools: Situation, Evolution and Perspectives, InSITE–Informing Science and IT Education Conferences

A.2. Review of doctoral dissertation

(*) Bizzarri, G. (2014). *Informatics education and teaching tools for secondary school learners*. Ph.D. in Computer Science and Applications, University of L'Aquila, Department of Computer Science. Supervisor: Luca Forlizzi, Department of Information Engineering,

Computer Science and Mathematics (DISIM) Via Vetoio, I–67100 Coppito, L'Aquila, Italy.

A.3. Other reviews

- MOFET Institute (The National Institute for Research and Development in Education)

B. Positions outside academic institutions

Dates	Institution / Organization	Activity	Appointment
(*) 2024–to date	Darka school network–creating change in the periphery	Development of a computational thinking learning module that utilizes a MOOC for teacher training and provides guidance throughout the implementation stage in middle school subjects across various disciplines	Advisor and Moderator
(*) 2024–to date	Samuel Neaman Institute for National Policy Research	International Round Table for Advancing STEM Excellence Skills	Member, a group of around 30 participants from key Israeli and international organizations dedicated to advancing STEM education and skills acquisition
(*) 2024	Division A – Education for Children and Youth at Risk, Ministry of Education	Implementation of skills among students with learning disabilities and special education students	Advisor
(*) 2023–2024	Program for International Student Assessment (PISA), OECD	The national committee responsible for adapting the PISA EU test for the new computational thinking unit in Israel	Advisor
(*) 2021–2023	Ofanim–a NGO that delivers a wealth of educational activities to children in Israel's periphery	Development of a computational thinking learning module that utilizes a MOOC and consulting in planning the entire STEM curricula for grades 7–8	Advisor and developer
(*) 2021–2022	European Union Commission: Joint Research Centre	European research on computational thinking. European Commission: Joint Research Centre	Participant in the online consultation events of Topic 1: Understanding of

Dates	Institution / Organization	Activity	Appointment
		https://data.europa.eu/doi/10.2760/126955	computational thinking and related concepts.
(*) 2020–2022	MOFET Institute (The National Institute for Research and Development in Education)	R&D project of interdisciplinary STEAM education	Team leader and coordinator
(*) 2020–2021	Sheatufim–Strategies for Social Impact	The TOP15 initiative: Promotion of excellent in STEM education of middle school students with an emphasis on the periphery and under presented populations	Member of the steering committee and consultant
(*) 2019–2020	Sheatufim–Strategies for Social Impact	Enhancing computational thinking skills in the context of STEM education	Member of the thinking team and consultant
2008	Ministry of Education	The Professional Committee for Teaching Computer Science	Advisor
2000–2008	"Machsava" (Thought) - the Israeli National Center for High School Computer Science Teachers, Technion–Israel Institute of Technology & Weizmann Institute of Science	Developed teaching materials for in–service high school computer science teachers. During 2005–2008, trained approximately 300 in–service teachers on the subject "Computer Science using Java" as part of the transition of the high school curriculum from using procedural languages to object–oriented languages	Member
1993–1995	Ministry of Education	Supervisor of computer science teachers from 70 high schools in the central district	Supervisor
1991–2012	Ministry of Education	Development and evaluation of the computer science matriculation exam	Developer and senior evaluator
1988–1998	Katznelson High School, Kfar–Saba	Teaching and developing the computer science study track	Teacher and head of the computer science studies track
1984–1994	Gymnasia Realit High School, Rishon Le–Zion	Teaching and developing the software engineering study track	Teacher and head of the computer science studies track

5. Additional Professional Experience in Academic Institutions

Dates	Institution / Organization	Activity	Appointment
(*) 2024	The National Academy of Sciences	The committee on computational thinking and artificial intelligence	Consultant
(*) 2022–2024	Beit Berl College & Samuel Neaman Institute & Ministry of Education	Embedding skills to promote excellence in STEM initiative: Teacher training and teacher of teachers training	Coordinator, developer, and head of the development team consisting of six senior faculty members
(*) 2020–2021	Beit Berl College	Developed MOOC on Computational Thinking, approved by Campus IL, a joint strategic initiative of The National Digital Israel Initiative and the Council for Higher Education	Developer and lecturer
1987–2004	Computer Science Group, Department of Science Teaching, Weizmann Institute of Science	Developed high school curricula and learning materials for the subjects: Expert Systems and Logic programming. Lecturer in professional development courses for teachers	Member

6. Participation in Scholarly Conferences

(*) indicates presentations since receiving the rank of senior lecturer (2011)

A. Active participation in international academic conferences

Date	Conference	Conference venue	Presentation type	Presentation title
(*) 25–29 August, 2025	The 15th Conference of the European Science Education Research Association (ESERA)	Copenhagen, Denmark	Paper presentation	Design and Implementation of Interdisciplinary STEM Education for a Transformative Era: The case of Teacher's Professional Development
(*) 26 February–1 March, 2025	SIGCSE 2025–Technical Symposium on Computer Science Education	Pittsburgh, Pennsylvania, USA	Lightning talk presentation	Spiral Cultivation of Soft Skills in Computer Science Education
(*) 26–27 June,	The 8th International	Mofet Institute (The	Paper presentation	Thinking and Understanding as

Date	Conference	Conference venue	Presentation type	Presentation title
2023	Conference on Teacher Education Passion and Professionalism in Teacher Education	National Institute for Research and Development in Education), Israel		Expressed in Elementary Online Science and Technology Activities
(*) 26–27 June, 2023	The 8th International Conference on Teacher Education Passion and Professionalism in Teacher Education	Mofet Institute, Israel	Paper presentation	The relationships among culture, pedagogical ideology, and educational change in Arab sector
(*) 11–12 May, 2023	ETE IV: STEM & Open Schooling for Sustainability Education, Educating the Educators	Naturalis Museum, Leiden, Netherlands	Paper presentation	Educating the educators: an innovative M.Ed. program in Integrative STEM Education incorporating open schooling principles
(*) 14–16 December, 2022	The 9th Annual Conference on Computational Science & Computational Intelligence (CSCI'22)	Las Vegas, Nevada, USA	Paper presentation	A MOOC on Computational Thinking for All: Pedagogical Principles, Challenges, and Their Application
(*) 5–6 July, 2022	The Wonders of STEM and STEAM Education: What, Why, and How?	Mofet Institute, Israel	Paper presentation	Leading Change in STEM Education: An Integrative STEM M.Ed. Program
(*) 5–6 July, 2022	The Wonders of STEM and STEAM Education: What, Why, and How?	Mofet Institute, Israel	Paper presentation	Key Competencies as a Promoter of Integrative STEM Education
(*) 17–18 May, 2022	IOSTE–SSD–Science–Society–Didactics	Pedagogical University of Cracow, Poland	Paper Presentation	Assimilated mobile learning in teaching hearing–impaired students integrated into regular education in elementary schools in the Arab sector

Date	Conference	Conference venue	Presentation type	Presentation title
(*) 18–20 December, 2019	ISSEP 2019– International Conference on Informatics in Schools: Situation, Evolution, and Perspectives	Larnaca, Cyprus	Paper presentation	What Are Computer Science Educators Interested in? The Case of SIGCSE Conferences
(*) 26–30 August, 2019	The 13th Conference of the European Science Education Research Association (ESERA)	Bologna, Italy	Paper presentation	Integrative STEM M.Ed. Degree Aligning with Contemporary Perspectives in Academia and Industry
(*) 26–30 August, 2019	The 13th Conference of the European Science Education Research Association (ESERA)	Bologna, Italy	Poster presentation	A Community Shared Approach to a M.Ed. Program on Integrative STEM
(*) 24–26 June, 2019	The 7th International Conference on Teacher Education: The Story of Innovation in Teacher Education	Mofet Institute, Israel	Paper presentation	Evaluating the Integration of Computers and Tablets in Teaching Students with Hearing Impairments
(*) 24–26 June, 2019	The 7th International Conference on Teacher Education: The Story of Innovation in Teacher Education	Mofet Institute, Israel	Round table presentation	Teachers' Attitudes Towards Using Online Assessment Tools to Diversify the Assessment Methods They Implement
(*) 10–12 October, 2018	ISSEP 2018– International Conference on Informatics in Schools: Situation, Evolution, and Perspectives	Saint–Petersburg, Russia	Paper presentation	Computational Thinking: Constructing the Perceptions of Pre–service Teachers from Various Disciplines
(*) 10–12 October, 2018	ISSEP 2018– International Conference on Informatics in	Saint–Petersburg, Russia	Paper presentation	A Diagnostic Tool for Assessing Students' Perceptions and Misconceptions

Date	Conference	Conference venue	Presentation type	Presentation title
	Schools: Situation, Evolution, and Perspectives			Regards the Current Object “this”
(*) 8–11 March, 2017	SIGCSE 2017 – Technical Symposium on Computer Science Education	Seattle, Washington, USA	Paper presentation	On the (mis) Understanding of the "this" Reference
(*) 23–24 March, 2015	Educating the Net–Generation Conference: Political and Cultural Aspects	Beit Berl College, Israel	Paper presentation	Examining Innovative Thinking Among Undergraduate Students in Education.
(*) Jun 30–Jul 4, 2014	InSITE 2014: Informing Science + IT Education Conference	Wollongong, Australia	Paper presentation	Drawing analogies between logic programming and natural language argumentation texts to scaffold learners’ understanding Best paper award
(*) 5–8 March, 2014	SIGCSE 2014– Technical Symposium on Computer Science Education	Atlanta, Georgia, USA	Paper presentation	STEM Teaching as an Additional Profession for Scientists and Engineers: The Case of Computer Science Education
(*) 2–4 July, 2013	The 6th International Conference on Teacher Education– Changing Reality through Education	Mofet Institute, Israel	Paper presentation	Higher–Order Thinking Skills as Reflected in Keywords in Questions in Two (Considerably) Different Disciplines: Linguistics and Computer Science
(*) 6–9 March, 2013	SIGCSE 2013– Technical Symposium on Computer Science Education	Denver, Colorado, USA	Paper presentation	What is it We are Asking: Interpreting Problem–Solving Questions in Computer Science and Linguistics
(*) 5–7 December, 2012	Doctoral consortium	Druskininka, Lithuania	Presenter and students tutor	Qualitative Research Methodology in computer science Education: My Principles and Examples
(*) 1–5 July, 2012	ITiCSE 2012– Innovation and	Haifa, Israel	Paper presentation	Integrating the Teaching of

Date	Conference	Conference venue	Presentation type	Presentation title
	Technology in Computer Science Education			Algorithmic Patterns into Computer Science Teacher Preparation Programs
(*) 26–29 October, 2011	ISEEP 2011	Bratislava, Slovak Republic	Paper presentation	Pre–Service Computer Science Teacher Training within the Professional Development School Collaboration Framework
9–12 March, 2011	SIGCSE 2011–Technical Symposium on Computer Science Education	Dallas, Texas, USA	Paper presentation	A Study on Attitudes and Emphases in Computer Science Teacher Preparation
10–13 March, 2010	SIGCSE 2010–Technical Symposium on Computer Science Education	Milwaukee, Wisconsin, USA	Paper presentation	A Survey of Computer Science Teacher Preparation Programs in Israel Tells Us: Computer Science Deserves Designated High School Teacher Preparation!
4–7 March, 2009	SIGCSE 2009–Technical Symposium on Computer Science Education	Chattanooga, Tennessee, USA	Paper presentation	Preparation of High School Computer Science Teachers: The Israeli Perspective
June 30 – July 2, 2008	ITiCSE 2008–Innovation and Technology in Computer Science Education	Madrid, Spain	Paper presentation	Tutoring Model for Promoting Teaching Skills of Prospective Computer Science Teachers
7–11 November, 2006	ISSEP 2006–International Conference on Informatics in Secondary Schools—Evolution and Perspectives,	Vilnius, Lithuania	Tutorial presentation	Research–Based Guidelines for Teaching OOP
23–27 February, 2005	SIGCSE 2005–Technical Symposium on Computer Science Education	St. Louis, Missouri, USA	Paper presentation	On Understanding the Statics and Dynamics of Object–Oriented Programs

Date	Conference	Conference venue	Presentation type	Presentation title
28–30 June, 2004	ITiCSE 2004–Innovation and Technology in Computer Science Education	Leeds, UK	Poster	A Refreshing Approach to an Academic Seminar Course

B. Active participation in national academic conferences in Israel

Date	Title of conference	Venue of the conference	Presentation type	Presentation title
(*) 25 March, 2025	The 2nd Tel Hai Conference on Pedagogy and Teaching in Academia	Katzrin Campus of Tel Hai Academic College	Paper presentation	A pedagogical model for integrating skills into learning and preparation for the work-force
(*) 15 May, 2018	INFO 2018–The 33rd Annual Conference & Exhibition; The Information World 2018: Innovation, Content, Technologies and Applications–Opportunities and Challenges	Hilton Hotel, Tel–Aviv, Israel	Paper presentation	So What is Innovation?
(*) 22 June, 2016	The 14TH Annual METAL National Conference	Bar–Ilan University, Israel	Poster presentation	What Do Students Choose to Study in a Seminar Dedicated to Evaluation in the Information Age?
(*) 22 June, 2016	The 14th Annual METAL National Conference	Bar–Ilan University, Israel	Paper presentation	Preference of Learning Paths in an Online course: A Comparison Between Individual Learning and Small–Group Learning.

C. Conferences of the National Center for Computer Science Teachers

Date	Title of conference	Venue of conference	Presentation type	Presentation title
(*) 26–28 June, 2017	Summer Seminar for Leading Computer Science Teachers	Ramat Rachel, Israel	Paper Presentation and leading a workshop	Computational Thinking–About What, Why and how

Date	Title of conference	Venue of conference	Presentation type	Presentation title
(*) 13 December, 2015	The 15th National Conference of Computer Science Teachers	Beit Berl College, Israel	Paper presentation	The Self Object “this”– What are We Talking About?
29 December, 2008	The 9th National Conference of Computer Science Teachers	Technion– Institute of Technology, Haifa, Israel	Paper presentation	Pedagogical– Disciplinary Tutoring of Prospective Computer Science Teachers
17 December, 2006	The 7th National Conference of Computer Science Teachers	Beit Berl College, Israel	Paper presentation	Teaching Guidelines for Teaching Object– Oriented Programming to Novices
28 December, 2005	The 6th National Conference of Computer Science Teachers	Achva College, Israel	Paper presentation	Points of Contradiction Between Procedural Programming and Object–Oriented Programming When Using the New Programming Languages
25 June, 2005	Programming Paradigms	Tel–Aviv University, Tel–Aviv, Israel	Paper presentation	First Experience Teaching Computer Science Foundations to High School Students using Java
11 March, 2003	Visualization and Animation Tools for Teaching Computer Science	Weizmann Institute of Science, Rehovot, Israel	Paper presentation	BlueJ–A Visualization Tool for Teaching Object–Oriented Programming
31 January, 2002	Software Design	Weizmann Institute of Science, Rehovot, Israel	Paper presentation	Computational Models as Abstract Data Types
13 December, 2001	The 2nd National Conference of Computer Science Teachers	Shfayim, Israel	Paper presentation	Experience Teaching Object–Oriented Programming to Novices
13 November, 2001	Recursion and Its Teaching to High School Students	Ohel-Shem Highschool, Ramat–Gan, Israel	Paper presentation	Recursion Through Paradigm Glasses
1 April, 2001	The Curriculum of the 3rd	Tel–Aviv University,	Paper presentation	Logic Programming

Date	Title of conference	Venue of conference	Presentation type	Presentation title
	Matriculation Exam Unit	Tel–Aviv, Israel		

D. Organization of international and national conferences

Date	Title of conference	Venue of conference	Role in conference
(*) 5–6 July, 2022	The Wonders of STEM and STEAM Education: What, Why, and How? Link	Mofet Institute, Israel (International)	Conference co-chair, Panel moderator
(*) 22 March, 2021	The wonders of interdisciplinarity in STEAM education Link	Mofet Institute, Israel (National)	Conference co-chair, Panel moderator
(*) 6–8 July, 2015	ITiCSE 2015, the 20th Annual Conference on Innovation and Technology in Computer Science Education Link	Vilnius, Lithuania (International)	(1) Member of the conference program committee (2) Working groups coordinator
(*) 3–5 July, 2012	ITiCSE 2012, the 17th Annual Conference on Innovation and Technology in Computer Science Education Link	Haifa, Israel (International)	(1) Member of the conference program committee (2) Working groups coordinator

7. International Invited Lectures

A. Invited lectures in academia

Date	Place	Institution	Title
(*) 5–7 December, 2012	Vilnius, Lithuania	Vilnius University	(1) Computer Science Teachers Preparation Programs in the World. Expand on the Israeli System and on Teachers Preparation Programs (2) Computing Pre-University Secondary Level Computing Curricula. Expand on the Israeli Computer Science Curriculum (3) Qualitative Research Methodologies in Computer Science Education – in Practice

B. Invited lectures for high school teachers

Date	Place	Organization	Presentation title
(*) 2 February, 2015	Beijing, China	RDFZ Seminar for High School Teacher	(1) The Challenge in Teaching CS (2) Secondary School Computer Science Curriculum and Teachers Preparation Programs (3) Object–Oriented Programming
14–15 December, 2010	Beit Berl College, Israel	A delegation of secondary school teachers from Russia	(1) Computing Pre–University: Secondary Level Computing Curricula (2) The Israeli HS National Curriculum CS Teachers preparation Programs.
31 June, 2004	Leads, UK	University of Leads, Workshop at the Annual Seminar for Computer Science Teachers	Object–Oriented Programming for High School Novices

8. Research Grants

Year	Role in Research	Funded by/ Amount	Funding	Co–Researchers	Research Topic
(*) 2014–2016	Senior research associate	Beit Berl College, Research Promotion Project	108,000 NIS	Prof. Orit Hazzan	STEM Teaching
				Dr. Gila Shilo	Problem solving in computer science and linguistics
				Dr. Ronit Shmallo	Teaching of OOP
				Dr. Osnat Dagan	Integrating online learning tools in teachers training
2010–2011	Research associate	Beit Berl College, Research Committee	12,000 NIS	Dr. Gila Shilo	Analogies between logic programming and natural language argumentation texts
2009–2010	Senior research associate	Beit Berl College, Research Committee	12,000 NIS	–	Pedagogical patterns when teaching recursion in computer science
2003–2004	Senior research associate	Beit Berl College, Research Committee	12,000 NIS	–	A new approach to teaching academic seminar in computer science

9. Scholarships, Awards and Prizes

A. Academic research

Year	Role in Research	Co–Researchers	Research Topic	Funded by/ Amount	Funding
2006–2007	Senior research associate	Prof. Orit Hazzan	Mentorship in the training of pre–service computer science teachers	Post–doctoral research scholarship from the Israeli Council for Higher Education	25,000 NIS
2004	Senior research associate	Prof. Mordechai Ben–Ari	Teaching OOP to high school novices	Department of Science Teaching, Orly Kaplan Prize for Outstanding Ph.D. Student	8,000 NIS
1997	Senior research associate	Prof. Mordechai Ben–Ari, Dr. Zahava Schrez	Teaching expert systems to high school student	Dean's prize for excelling M.Sc. thesis	2,500 NIS

B. Contribution to the field of education

Year	Award	Contribution	Funded by	Total funding
(*) 2022	The Dr. Yael Shiloach Memorial Award for researchers in the field of education	The award is granted to an active faculty member for a significant contribution to the formal and informal education system, to teacher training, to educational research, and to the development of programs.	Shiloach family	10,000 NIS

10. Teaching

A. Courses taught in the last ten years

Beit Berl College, Faculty of Education

Year	Name of Course	Degree	Number of Students
2024-2025	Pedagogical Innovation in Teaching and Learning	Teaching Certificate and M.Teach	60-80
2023–2025	Thinking Strategies in Data analysis	Teaching Certificate for Data Science students	10-15
2021–2024	Analysis of Interdisciplinary Projects and Research in Industry and Academia	M.Ed. in Interdisciplinary STEM Education	10–15

2021–2024	PBL Based Development of STEM Project	M.Ed. in Interdisciplinary STEM Education	10–15
2021–2024	Expanding the Disciplinary and Interdisciplinary Knowledge of STEM Topics	M.Ed. in Interdisciplinary STEM Education	10–15
2017–2025	Computational Thinking	B.Ed. and Teaching Certificate	15–40
2015–2025	Object–Oriented Programming	Computer Science Program	15–20
2015–2025	Computational Models	Computer Science Program	15–20
2020	Technological Pedagogical Innovation Emphasizing Mobile Learning	M.Teach.	25
2019–2020	Distance Teaching and Learning	M.Teach.	25–45
2019–2020	Education and Teaching Research Seminar	M.Teach.	25–30
2015–2020	Teaching in the Information Era Research Seminar	M.Ed.	16–18

Technion – Israel Institute of Technology, Faculty of Education in Science and Technology

Year	**Name of Course**	**Degree**	**Number of Students**
2010–2019	Micro Worlds Teaching in Computerized Environments	B.Sc. and M.Sc.	20–30
2008–2019	Methods of Teaching Computer Science	B.Sc. and M.Sc.	15–25
2010–2018	Advanced Issues in Computer Science Education, Programming Paradigms	B.Sc. and M.Sc.	15–25

B. Supervision of graduate students

B.1. Doctoral students

Name of student and co-supervisor	**Title of thesis**	**Date of completion**	**Institution**
(*) William Fargun Co- supervisor: Prof. Yosef Swartz	From Euclid to machine learning: Computational thinking skills between technological innovation and traditional methods of learning	Started 2023, in progress	Tel–Aviv University
(*) Haneen Vasel Co- supervisor: Dr. Hagay Kopermints	Knowledge and attitudes of teachers who teach the "Computer Science and Robotics for Elementary School" curriculum in relation to conceptual and applied aspects	2021	Haifa University

(*) Sigal Morad Co- supervisor: Prof. Miriam Bark	The relations between culture and educational–organization change: Implementing innovative pedagogy in an elementary school in the Arab sector as a case study	2018	Technion Institute of Science

B.2. M.Ed. students

Name of student	Title of thesis	Date of completion	Institution
(*) Tsruia Ezuz	Advancing creativity education informed by brain research	Started 2024, in progress	Beit Berl College
(*) Tomer Crudo	How does the integration of a Chabot affect the implementation of effective differentiated instruction in high school humanities subjects?	Started 2024, in progress	Beit Berl College
(*) Inbal Blich	The cognitive factors involved in the 2D drawing process describing a 3D construction done by 5–year–old kindergarten children Final grade: 90	2023	Beit Berl College
(*) Nurit Dubzinski	Examination of students' high levels thinking skills performances as reflected in using different online learning environments. Final grade: 95	2019	Beit Berl College
(*) Haneen Vasel	Integrating computers and tablets in teaching and learning processes for students with hearing impairment Final grade: 91	2016	Beit Berl College

B.3. Final projects in M.Ed. Programs

Name of student	Title of project	Date of completion	Institution
(*) Adar Ran	Use of computer–based activities using interactive presentations to promote reaching among 2nd graders	2016	Beit Berl College
(*) Amal Thaya	Development of online teaching unit that trains teachers in the integration of online digest for teaching the subject “Technology in Management Systems”	2013	Beit Berl College
Moshe Shmuel	Assimilating the use of Mashov software in the high school	2011	Beit Berl College

11. Publications

A. Ph.D. dissertation

Ragonis, N. (June 2004). Object–Oriented Programming Instruction for High School Novices in Java; 233 pages; Hebrew; Weizmann Institute of Science, Department of Science Teaching; Supervisor: Prof. Mordechai Ben–Ari

B. Books and editing

B.1. Books

1. (*) Hazzan, O., **Ragonis, N.**, & Lapidot, T. (2026). *Guide to teaching computer science: An activity–based approach* (4th edition). London, UK: Springer. (21 chapters, 226 Activities, 506 pages) Link to the book website
2. (*) Hazzan, O., **Ragonis, N.**, & Lapidot, T. (2020). *Guide to teaching computer science: An activity–based approach* (3rd edition). London, UK: Springer. (18 Chapters, 153 Activities, 402 pages) Link to the book website
3. (*) Hazzan, O., Lapidot, T., & **Ragonis, N.** (2014). *Guide to teaching computer science: An activity–based approach* (2nd edition). London, UK: Springer. (16 Chapters, 110 Activities, 285 pages)
4. (*) Hazzan, O., Lapidot, T., & **Ragonis, N.** (2011). *Guide to teaching computer science: An activity–based approach* (1st edition). London, UK: Springer. (16 Chapters, 95 Activities, 247 pages)

B.2. Peer-reviewed proceedings editing

5. (*) **Ragonis, N.,** & Kinnunen, P. (2015). *Proceedings of the 2015 ITiCSE on Working Group Reports*. ACM, New York, NY, USA.
6. (*) Adams, L., & **Ragonis, N.** (2012). *Proceedings of the Final Reports on Innovation and Technology in Computer Science Education 2012 Working Groups*. ACM, New York, NY, USA.

C. Peer-reviewed papers

C.1. Papers published in international peer-reviewed journals

1. (*) **Ragonis, N.**, & Hazzan O. (2026). Computational thinking across disciplines: A taxonomy of pedagogical approaches reflected in prospective teachers' simulations of computational processes. *Informatics in Education, 25*(1), 173-199.
2. (*) Vasel, H., **Ragonis, N.**, & Kupermintz, H. (2025). Cultural influences on pedagogical ideology: Implications for educational change in an Arab-Israeli school. *Educational Studies* 1-25.
3. (*) **Ragonis, N.**, Rosenberg–Kima R, & Hazzan O. (2025). Computational thinking course for all preservice K-12 teachers: implementing the four pedagogies for developing computational thinking (4P4CT) framework. *Educational Technology Research and Development, 73(1), 301-329.*

   https://doi.org/10.1007/s11423-024-10406-5

4. (*) Vasel, H., & **Ragonis, N.** (2024). Empowering hearing–impaired students: A mobile learning intervention in Israeli Arab elementary education. *Journal of Research in Special Education Needs.* https://doi.org/10.1111/1471-3802.12697
5. (*) Shilo, G., & **Ragonis, N.** (2023). Students' abilities to formulate exhaustive titles as a key to comprehending arguments. *International Journal of Applied Linguistics, 33*(2), 132–149.
6. (*) Mike, K., **Ragonis, N.**, Rosenberg–Kima, R., & Hazzan, O. (2022). Computational thinking in the era of data science. *Communications of the ACM, August 2022, 65*(8), 33–35. http://doi.org/10.1145/3545109
7. (*) **Ragonis, N.**, & Shmallo, R. (2022). The application of higher–order cognitive thinking skills to promote students' understanding of the use of static in object–oriented programming. *Informatics in Education, 21*(2), 331–352.
8. (*) Shmallo, R., & **Ragonis, N.** (2021). Understanding the "this" reference in object-oriented programming: Misconceptions, conceptions, and teaching recommendations. *Education and Information Technologies*, *26*(1), 733–762.
9. (*) Morad, S., **Ragonis, N.**, & Barak, M. (2021). An integrative conceptual model of innovation and innovative thinking base on synthesis of literature review. *Thinking Skills and Creativity, 40*, 100824.
10. (*) Morad, S., **Ragonis, N.**, & Barak, M. (2021). The validity and reliability of a tool for measuring educational innovative thinking skills. *Journal of Teaching and Teacher Education, 97*, 103193. https://doi.org/10.1016/j.tate.2020.103193
11. (*) **Ragonis**, N., Hazzan, O., & Har–Shay, G. (2020). Students' awareness and embracement of soft skills by learning and practice teamwork. *Journal of Information Technology Education: Innovations in Practice (JITE:IIP), 19,* 185–201.
12. (*) Shilo, G., & **Ragonis, N.** (2019). A new approach to high–order cognitive skills in linguistics: problem–solving inference in similarity to computer science. *Journal of Further and Higher Education*, *43*(3), 333–346.
13. (*) **Ragonis, N.**, & Shilo, G. (2018). Analogies between logic programming and linguistics for developing students' understanding of argumentation texts. *Journal of Information Technology Education: Research*, *17*, 549–575.
14. (*) **Ragonis, N.**, & Shilo, G. (2014). Drawing analogies between logic programming and natural language argumentation texts to scaffold learners' understanding. *Journal of Information Technology Education: Research, 13*, 73– 89.
15. Haberman, B., & **Ragonis, N.** (2010). So different though so similar?–Or vice versa? Exploration of the logic programming and the object–oriented programming paradigms. *Issues in Informing Science and Information Technology, 7*, 393–402.
16. **Ragonis, N.**, & Hazzan, O. (2009). A tutoring model for promoting the pedagogical–disciplinary skills of prospective teachers. *Mentoring & Tutoring: Partnership in Learning*, *17*(1), 50–65.
17. **Ragonis, N.**, & Hazzan, O. (2009). Integrating a tutoring model into the training of prospective computer science teachers. *Journal of Computers in Mathematics and Science Teaching*, *28*(3), 309–339.

18. **Ragonis, N.**, & Ben–Ari, M. (2005). A long–term investigation of the comprehension of OOP concepts by novices. *Computer Science Education*, *15*(3), 203–221.

C.2. Papers published in the leading computer science education peer-reviewed conference proceedings considered as journal publications[1]

- ITiCSE–*ACM* Conference on *Innovation and Technology in Computer Science Education*
- SIGCSE–*ACM SIG on Computer Science Education*

19. (*) Ragonis, N. (2025, February). Spiral Cultivation of Soft Skills in Computer Science Education. In *Proceedings of the 56th ACM Technical Symposium on Computer Science Education, 2,* 1744. SIGCSE 56th, Pittsburgh, Pennsylvania, USA, February 26 - March *01, 2025.*
20. (*) **Ragonis, N.**, & Shmallo, R. (2017). On the (Mis) understanding of the "this" reference. *Proceedings of the 2017 ACM SIGCSE Technical Symposium on Computer Science Education*, 489–494. SIGCSE 48th, Seattle, WA, USA, 8–11 March 2017.
21. (*) Hazzan, O., & **Ragonis, N.** (2014). STEM Teaching as an additional profession for scientists and engineers: The case of computer science education. *Proceedings of the 45th ACM technical symposium on Computer science education*, 181–186. SIGCSE 45th, Atlanta, GA, USA, 5–8 March 2014.
22. (*) **Ragonis, N.**, & Shilo, G. (2013). What is it we are asking: Interpreting problem–solving questions in computer science and linguistics. *Proceeding of the 44th ACM technical symposium on Computer science education*, 189–194. SIGCSE 44th, Denver, CO, USA, 6–9 March 2013.
23. (*) Shmallo, R., **Ragonis, N.**, & Ginat, D. (2012). Fuzzy OOP: Expanded and reduced term interpretation. *Proceedings of the 17th ACM annual conference on Innovation and technology in computer science education*, 309–314. ITiCSE 17th, Haifa, Israel, 3–5 July 2012.
24. (*) **Ragonis, N.** (2012). Integrating the teaching of algorithmic patterns into computer science teacher preparation programs. *Proceedings of the 17th ACM annual conference on Innovation and technology in computer science education*, 339–344. ITiCSE 17th, Haifa, Israel, 3–5 July 2012.
25. (*) **Ragonis, N.**, Hazzan, O., & Gal–Ezer, J. (2011). A study on attitudes and emphases in computer science teacher preparation. *Proceedings of SIGCSE 2011 – The 42st ACM Technical Symposium on Computer Science Education*, 401–405. SIGCSE 42th, Dallas, Texas, USA, 9–12 March 2011.
26. **Ragonis, N.**, Hazzan, O., & Gal–Ezer, J. (2010). A survey of computer science teacher preparation programs in Israel tells us: Computer science deserves a designated high school teacher preparation! *Proceedings of SIGCSE 2010–The 41st ACM Technical Symposium on Computer Science Education*, 401–405. SIGCSE 41th, Milwaukee, WI, USA, 10–13 March 2010.
27. Gal–Ezer, J., Hazzan, O., & **Ragonis, N.** (2009). Preparation of high school computer science teachers: The Israeli perspective. *Proceedings of the 40th ACM*

technical symposium on Computer science education, 41(1), 269–270. SIGCSE 40th, Chattanooga, TN, USA, 4–7 March 2009.

28. **Ragonis, N.**, & Hazzan, O. (2008). Tutoring model for promoting teaching skills of computer science prospective teachers. *ACM SIGCSE Bulletin, 40(3),* 276–280. ITiCSE 13th, Madrid, Spain, 30 June–2 July 2008.
29. **Ragonis, N.**, & Ben–Ari, M. (2005). On understanding the static's and dynamics of object–oriented programs. *ACM SIGCSE Bulletin*, *37*(1), 226–230. SIGCSE 36th, St. Louis, MO, USA, 23–27 February 2005.

C.3. Papers published in international peer-reviewed magazines

30. (*) **Ragonis, N.**, Bukai, A., & Hazzan, O. (2022). Selecting examples for CS courses: The case of a computational thinking MOOC. *ACM Inroads*, *13*(3), 22–28.
31. (*) **Ragonis, N.** (2012). Type of questions–The case of computer science. *Olympiads in Informatics, 6*, 115–132.
32. Hazzan, O., Gal–Ezer, J., & **Ragonis, N.** (2010). How to establish a computer science teacher preparation program at your university? The ECSTPP workshop. *ACM Inroads*, *1*(1), 35–39.
33. **Ragonis, N.** (2010). A pedagogical approach to discussing fundamental object–oriented programming principles using the ADT SET. *ACM Inroads, 1*(2), 42–52.

C.4. Paper published in Israeli peer-reviewed journals (in Hebrew, no indicators)

34. (*) Vasel, H., **Ragonis, N.**, & Kupermintz, H. (2024). Cultural factors and pedagogical ideology in relation to leading organizational–educational change in Arab sector. *Social Issues in Israel, 33*(1), *33-76.*
35. (*) Vasel, H., & **Ragonis, N.** (2024). Perceptions of mobile learning for students with hearing impairment in the Arab sector: Insights from students, teachers, and parents. *Special Education Research*, *5*, 101-132.
36. (*) Shilo, G., & **Ragonis, N.** (2014). Exposing the logical structure of natural language argumentation text by formalizing in logic programming. *Dapim*, *57*, 55–82.

D. Invited refereed book chapters

1. (*) **Ragonis, N.**, & Dagan, O. (2019). Enhance active learning in higher education by using mobile learning. In A. Forkosh Baruch & H. Meishar Tal *Mobile Technologies in Educational Organizations*, 15–41. Hershey, Pennsylvania: IGI Global.
2. **Ragonis, N.** (2009). Computing pre–university: Secondary level computing curricula. In E. D. Benjamin & W. Wah (Eds.), *Wiley encyclopedia of computer science and engineering*, 632–648. Hoboken, NJ: John Wiley & Sons.

E. Publications in peer reviewed conference proceedings

E.1. Papers published in international peer-reviewed conference proceedings

1. (*) Dagan, O., **Ragonis, N.**, & Goldman, D. (2023). Insights from the implementation of the course “Development of an interdisciplinary STEM project via PBL approach” in an 'Integrative STEM Education' M.Ed. program. In *The 40th International Pupils’ Attitudes Towards Technology Conference Proceedings 2023* (Vol. 1, No. October). Liverpool, UK, 31 October–3 November 2023.
2. (*) **Ragonis, N.**, Goldman, D., & Dagan, O. (2023). Educating the educators: An innovative M. Ed. program in integrative STEM education incorporating open schooling principles. *STEM & Open Schooling for Sustainability Education*, 84–92. Leiden, Netherlands, 11–12 May 2023.
3. (*) **Ragonis, N.**, & Hazzan, O. (2022). A MOOC on computational thinking for all: pedagogical principles, challenges, and their application. In *2022 International Conference on Computational Science and Computational Intelligence (CSCI)*, *IEEE*, 1943–1949. Las Vegas, NV, USA, 14–16 December 2022.
4. (*) Dagan, O., **Ragonis, N.**, Wagner, T., & Goldman, D. (2019). Integrative STEM education –A new M.Ed. program: development, objectives, and challenges. *Proceedings of Pupils Attitudes Toward Technology – PATT 37 – Developing a knowledge economy through technology and engineering education*, 125–132. Msida, Malta, 03–06, June 2019.
5. (*) **Ragonis, N.**, & Hazzan O. (2019). What are computer science educators interested in? The case of SIGCSE conferences. In: Pozdniakov S., Dagienė V. (Eds.) Informatics in Schools. ISSEP 2019. New Ideas in School Informatics. *Lecture Notes in Computer Science*, *vol 11913*, (pp. 28–40). Springer, Cham.
6. (*) **Ragonis, N.** (2018). Computational thinking: Constructing the perceptions of pre–service teachers from various disciplines. In S. Pozdniakov & V. Dagienė (Eds.) Informatics in Schools–Fundamentals of Computer Science and Software Engineering. ISSEP 2018. *Lecture Notes in Computer Science*, *vol 11169*, (pp. 167–179). Springer, Cham.
7. (*) **Ragonis, N.**, & Shmallo, R. (2018). A diagnostic tool for assessing students’ perceptions and misconceptions regards the current object “this”. In S. Pozdniakov & V. Dagienė (Eds.) Informatics in Schools–Fundamentals of Computer Science and Software Engineering. ISSEP 2018. Lecture Notes in Computer Science, vol 11169, (pp. 84–100). Springer, Cham.
8. (*) Barak, M., Morad, S., & **Ragonis, N.** (2014). Students’ innovative thinking and their perceptions about the ideal learning environment. In: Uden L., Wang L., Corchado Rodríguez J., Yang HC., Ting IH. (Eds). *The 8th International Conference on Knowledge Management in Organizations,*111–125. Dordrecht: Springer.
9. (*) **Ragonis, N.** (2013). Problem–solving strategies must be taught implicitly. In *Informatics in Schools: Local Proceedings of the 6th International Conference ISSEP 2013–Selected Papers*, 155–158. Oldenburg, Germany, 26 February–2 March 2013.
10. (*) **Ragonis, N.**, & Oster–Levinz, A. (2011). Pre–service computer science teacher training within the professional development school (PDS) collaboration framework. In: Kalaš I., Mittermeir R.T. (Eds.) Informatics in Schools–Contributing to 21st Century Education. ISSEP 2011. *Lecture Notes in Computer Science, vol 7013*, (pp. 106–116). Berlin, Heidelberg: Springer.

11. **Ragonis, N.**, & Hazzan, O. (2010). A reflective practitioner's perspective on computer science teacher preparation. p*roceedings of the 4th International Conference on Informatics in Secondary Schools: Evolution and perspective (ISSEP)*, 89–105. Zürich, Switzerland, 13–16 January 2010.
12. **Ragonis, N.**, & Hazzan, O. (2008). Disciplinary–pedagogical teacher preparation for pre–service computer science teachers: Rationale and implementation. In R. T. Mittermeir & M. M. Syslo (Eds.) Informatics education–Supporting computational thinking. ISSEP 2008. Lecture Notes in Computer Science, *vol 5090*, (pp. 253–264). Berlin, Heidelberg: Springer.
13. **Ragonis, N.**, & Haberman, B. (2003). Management issues of flexible, multi–level distance learning–based teacher training. *Proceedings of the 3rd IEEE International Conference on Advanced Learning Technologies (ICALT)*, 428–429. Athens, Greece, 9–11 July 2003.
14. **Ragonis, N.**, & Ben–Ari, M. (2002). Teaching constructors: A difficult multiple choice. *Proceedings of the Sixth Workshop on Pedagogies and Tools for Learning Object Oriented Concepts in ECOOP 2002*. Málaga, Spain, 10–14 June, 2002.
15. Ben–Ari, M., **Ragonis, N.**, & Ben–Basat Levi, R. (2002). A vision of visualization in teaching object–oriented programming. Proceedings of the Second Program Visualization Workshop, *DAIMI Report Series*, *31*(567), 83–89. Aarhus, Denmark, 27–28 June 2002.
16. Scherz, Z., Haberman, B., & **Ragonis, N.** (1994). Introduction to logic programming: The development of a multilevel curriculum. *Proceedings of the 7th ICLP workshop on Logic Programming in Education*. Santa–Margarita, Italy, 13–18 June 1994.
17. Scherz, Z., Haberman, B., **Ragonis, N.**, & Shapiro, E. (1993). Expert systems by high school students in PROLOG environment. *Proceedings of the 7th International PEG Conference*. Edinburgh, Scotland, 2–4 July 1993.

E.2. Papers published in Israeli peer-reviewed conference proceedings

(No indicators)

18. (*) Morad, S., **Ragonis, N.**, & Barak, M. (2014). Innovative thinking and ICT expertise of undergraduate students in education. In Y. Eshet–Alkalai, A. Caspi, N. Geri, Y. Kalman, V. Silber–Varod & Y. Yair (Eds.), *Learning in the Technological Era: Proceedings of the 9th Chais Conference for the Study of Innovation and Learning Technologies*, 112–120. The Open University of Israel, Reanna, Israel, 11–12 February 2014.

E.3. Posters published in international peer-reviewed conference proceedings

19. (*) Lapidot, T., & **Ragonis, N.** (2013). Supporting high school computer science teachers in writing academic papers. In *proceedings of the 18th Annual Conference on Innovation and Technology in Computer Science Education*, 325. ITiCSE 18th, Canterbury, England, 1–3 July 2013.
20. **Ragonis, N.**, & Haberman, B. (2010). Linking different programming paradigms: thoughts about instructional design. *Proceedings of the fifteenth annual conference on Innovation and technology in computer science education*, 310. ITiCSE 15th, Ankara, Turkey, 26–30 June 2010.

21. **Ragonis, N.** (2004). A refreshing approach to an academic seminar course. *ACM SIGCSE Bulletin*, *36*(3), 236. ITiCSE 9th, Leeds, United Kingdom, 28–30 June 2004.
22. **Ragonis, N.**, & Haberman, B. (2003). A multi–level distance learning–based course for high–school computer science leading–teachers. *Proceedings of the 8th annual conference on Innovation and technology in computer science education*, 224–224. ITiCSE 8th, Thessaloniki, Greece, 30 June–2 July 2003.
23. **Ragonis, N.**, Scherz, Z., Ben–Ari, M., & Shapiro, E. (1998). Development, implementation and evaluation of a course in expert systems for high–school students. *ACM SIGCSE Bulletin*, *30*(3), 300.

E.4. Tutorial in international peer-reviewed conference

24. **Ragonis, N.** (2006). Research–based guidelines for teaching OOP. *2nd International Conference on Informatics in Secondary Schools—Evolution and Perspectives*, 698–700. ISSEP 2006, Vilnius, Lithuania, 7–11 November 2006.

F. Peer-reviewed presentations at conferences w/o proceedings

1. (**) **Ragonis, N.**, Dagan, O., & Goldman, D. (2026, in press). Reflection as a Mirror of Learning: Examining Course and Program Goal Alignment in Interdisciplinary STEM Education. *PATT 43, Pupils' Attitudes Towards Technology Conference*. June 2026, Norrköping, Sweden.
2. (**) **Ragonis, N.**, & Hazzan, O (2026, in press). Conceptualizing the Relationship Between Computational Thinking and Design: Insights from the Perspective of the 4P4CT Pedagogical Framework. *PATT 43, Pupils' Attitudes Towards Technology Conference*. June 2026, Norrköping, Sweden.
3. (*) **Ragoins, N.**, Dagan, O., & Goldman, D. (2025). *Preparing teachers for Integrative STEM Education in an era of transition and transformation: An innovative M.Ed. Program.* The 15th Conference of the European Science Education Research Association (ESERA), Copenhagen, Denmark, Italy, 25–29 August 2025.
4. (*) **Ragoins, N.**, Wagner, T., Goldman, D., & Dagan, O. (2019). *Integrative STEM M.Ed. Degree Aligning with Contemporary Perspectives in Academia and Industry*. The 13th Conference of the European Science Education Research Association (ESERA), Bologna, Italy, 26–30 August 2019.
5. (*) **Ragonis, N.**, & Hazzan, O. (2018). *What are computer science educators interested In? The case of SIGCSE conferences*. Lightning Talk presented at the fourteenth annual ACM International Computing Education Research (ICER) conference, Espoo, Finland, 13–15 August 2018.
6. (*) Shilo, G., & **Ragonis, N.** (2016*). Testing the effect of learning two disciplines: Language and computer science for understanding the argumentation texts*. 2016 NAPH International Conference on Hebrew Language, Literature and Culture, Brown University, Providence, Rhode Island, 21–23 June 2016.
7. (*) **Ragonis, N.**, & Shilo, G. (2013). *Higher–order thinking skills as reflected in keywords in questions in two (considerably) different disciplines: Linguistics and computer science*. The 6th International Conference on Teacher Education–Changing Reality through Education, Mofet Institute, 2–4 July 2013.

G. Other scientific publications

G.1. Academic programs (in Hebrew)

1. (*) Potchter, O., **Ragoins, N.**, & Nehemya, R. (2024). B.Ed. program in Data Analytics. Beit Berl College.

   Program curricula: Link

2. (*) **Ragoins, N.**, & Potchter, O. (2021). Teaching certificate program in Data Analytics. Beit Berl College.

   Program website: Link

3. (*) **Ragoins, N.**, Dagan, O., Wagner, T., & Goldman, D. (2020). M.Ed. in Interdisciplinary STEM Education. Beit Berl College.

   Program website:
   https://www.beitberl.ac.il/academic/stem/?csrt=8227631324646961750

   Program curricula: Link

G.2. Blogs

1. (*) **Ragonis, N.**, & Hazzan, O. (2022). Reflection Pre–learning in Computer Science Courses. *Blog@CACM*, *Communications of the ACM* (January 24, 2022) Link
2. (*) **Ragonis, N.**, & Hazzan, O. (2021). Computational Thinking: The Discussion Continues. *Blog@CACM*, *Communications of the ACM* (November 23, 2021) Link
3. (*) Hazzan, O., & **Ragonis, N.** (2021). The Solar System from the Computational Thinking Perspective. *Blog@CACM*, *Communications of the ACM* (August 30, 2021) Link

G.3. Curriculum development and review

1. **Ragonis, N.** (2005). Curriculum in Computer Skills for the Israeli Ministry of Economy and Industry, the Manpower Training and Development Bureau. Beit Berl College, Curriculum Planning Center.
2. **Ragonis, N.**, & Ben–Ari, M. (2005). Report on the transition of the curriculum Fundamentals of Computer Science to Advanced Programming Languages Java and C#. Weizmann Institute of Science, The Center for Science Education, The Israeli Ministry of Education, Curricula Development Department.
3. Scherz, Z., Shapira E., Shmueli, O., Liberman, N., & **Ragonis, N**. (1999). Curriculum in Computer Science for High School in the Israeli State and State–Religious Education. Participated in writing of the syllabus for the logic programming study unit. The Israeli Ministry of Education, Culture and Sports.

G.4. Position papers

1. (*) **Ragonis, N.**, Hazzan, O., & Rosenberg–Kima, R. (2019). *Computer Science / Programming / Computational Thinking in Education: Research and Literature Review.* Paper for the Initiative 5P2 to Expand the Circle of Excellence in Mathematics, Physics, Chemistry and Technology. (In Hebrew) Link
2. (*) **Ragonis, N.**, Hazzan, O., & Rosenberg–Kima, R. (2019). *C4CT Pedagogy: Constructionist Holistic Pedagogy for Developing Computational Thinking*. Position Paper for the Initiative 5P2 to Expand the Circle of Excellence in Mathematics, Physics, Chemistry and Technology. (In Hebrew) Link
3. (*) **Ragonis, N.**, Dagan, O., Wagner, T., & Goldman, D. (2017). REAL STEAM for Developing the Next Generation Problem Solvers. MASHAV Educational Training Center, May 2017 Booklet STEM. Link

G.5. Publications of the National Center for Computer Science Teachers (In Hebrew)

1. (*) Shmallo R., **Ragonis, N.**, & Ginat, D. (2013). Fuzzy OOP: Expanded and reduced term interpretation. *Hebetim–The Computer Science Israeli Teachers Magazine*, January 2013, 20–29.
2. **Ragonis, N.** (2007). A literature survey–In preparation for the development of new CS HS curriculum. *Hebetim–The Computer Science Israeli Teachers Magazine*, June 2007, 17–37.
3. **Ragonis, N.** (2006). Algorithms efficiency: An example of big–O improvement for two–dimensions array problem solving. *Hebetim–The Computer Science Israeli Teachers Magazine*, June 2006, 34–38.
4. **Ragonis, N.** (2004). The busy beaver problem. *A binder of famous unsolved Computer Science problems*. Link
5. **Ragonis, N.** (2003). Interactive visualization for teaching object–oriented programming using BlueJ. *A binder of lab activities and demonstrations.*

G.6. High school textbooks (In Hebrew)

1. (*) **Ragonis, N.**, & Man, S. (2015). *Data Structures in Java and C#.* Hod–Hasharon: Mabat Lahalonot.
2. (*) **Ragonis, N.**, & Man, S. (2014). *Computer Science Foundations in Java and C#–an Object First Approach*. Hod–Hasharon: Mabat Lahalonot.
3. **Ragonis, N.**, & Man, S. (2007). *Computer Science Foundations in Java and C#–* part b. Hod–Hasharon: Mabat Lahalonot.
4. **Ragonis, N.**, & Man, S. (2007). *Software Design in Java and C#.* Hod–Hasharon: Mabat Lahalonot.
5. **Ragonis, N.** (2001). *Preparations for Matriculation Exams in Computer Science–Advanced.* Hod–Hasharon: Mabat Lahalonot.
6. **Ragonis, N.** (2000, 2003). *Preparations for Matriculation Exams in Computer science–Foundations* (In Paskal and C). Hod–Hasharon: Mabat Lahalonot.
7. **Ragonis, N.** (1992, 1996). *Introduction to Expert Systems*–Teacher guide. Weizmann Institute of Science and The Israeli Ministry of Education.

8. **Ragonis, N.** (1992, 1996). *Introduction to Expert Systems*. Weizmann Institute of Science and The Israeli Ministry of Education.

G.7. Scientific editing of high school textbooks (In Hebrew)

1. (*) Hardy, K. (2019). *Object–Oriented Programming*. Mabat Lahalonot.
2. Man, S., and Avrams, R. (2009). *Computational Models*. Mabat Lahalonot.
3. Man, S., Giladi, P., and Avrams, R. (2007). *Computer Science Foundations in Java and C#*–Part A. Mabat Lahalonot.

H. Publications in review

H.1. Publications under review in academic journals

1. Morad, S., **Ragonis, N.**, & Barak, M. (under second revision). Preservice teachers' definitions of innovative thinking and their self–perceptions as innovative thinkers. Under review: Journal of Thinking Skills and Creativity
2. **Ragonis, N.**, & Hazzan O. (under second revision). Enhancing Computational Thinking through a MOOC for All: Applying the 4P4CT Framework. Under review: Journal of Computing in Higher Education

H.2. Publications under review for academic conferences

3. **Ragonis, N.**, Dagan, O., & Goldman, D. (Abstract accepted, paper is to be submitted for review). Reflection as a Mirror of Learning: Examining Course and Program Goal Alignment in Interdisciplinary STEM Education. *PATT 43, Pupils' Attitudes Towards Technology Conference*. June 2026, Norrköping, Sweden.
4. **Ragonis, N.**, & Hazzan, O (Abstract accepted, paper is to be submitted for review). Conceptualizing the Relationship Between Computational Thinking and Design: Insights from the Perspective of the 4P4CT Pedagogical Framework. *PATT 43, Pupils' Attitudes Towards Technology Conference*. June 2026, Norrköping, Sweden.
5. Hazzan, O, & **Ragonis, N.** (Abstract accepted, paper is to be submitted for review). Conceptualizing Agentic Programming with Scratch: Reducing Abstraction Barriers and Enhancing Computational Thinking. *49th ICT and Electronics conventions*, Opatija, Croatia.

H.3. Research papers in progress

1. **Ragonis, N.**, & Shmallo R.: Using Errors as Learning Opportunities in Computer Science Education: A Literature Review
2. **Ragonis, N.**, Dagan, O., & Goldman, D.: Realizing Interdisciplinary STEM Education: Conceptual Foundations and Pedagogical Practices through Project-Based Learning

3. **Ragonis, N.**, & Hazzan, O.: Exploring Disciplinary Characteristics of Computational Processes Through the Eyes of Preservice Teachers Engaged in Simulation Design
4. Blich, I., **Ragonis, N.**, & Dagan, O.: Cognitive factors in 5–Year–Olds' 2D drawings depicting 3D constructions: A kindergarten study
5. Dubzinski, N. & **Ragonis, N.**: Analyzing students' high–level thinking skills requirements in science online learning environments