NOA RAGONIS

Curriculum Vita and List of Publications

July 2024

1. Personal Details

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Research Gate: Noa Ragonis, Research interest score: 530.0, h–index: 14, Citations: 891

Google Scholar: Noa Ragonis, h–index: 15, i-10–index: 22, Citations: 1,144

Semantic Scholar: Noa Ragonis, Number of publications: 76, Citations: 735

2. Higher Education

a. Undergraduate and graduate studies

Period of study	Name of institution and department	Degree acquired	Year of approval of degree
1981 – 1984	Bar Ilan University, Ramat – Gan, Israel Faculty of Exact Sciences, Computer Science and Mathematics track. Summa cum laude	B.Sc.	1984
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
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

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. Recipient of research scholarship from the Israeli Council for Higher Education.	2007

c. Teaching diploma and license

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

3. Academic Ranks and Tenure in Institutes of Higher Education

Dates	**Name of institution and department**	**Rank**
1997	Beit Berl College	Teacher
2007	Technion Institute of Technology	Senior Lecturer (part – time)
2008	Beit Berl College	Tenure Lecturer
2011	Beit Berl College	Senior Lecturer

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

4. Offices and Positions in Academic Administration

Dates	Name of Institution	Office	Appointment
1999 – 2008	Beit Berl College	Computer Science Department, Faculty of Education	Head
2006 2015	Beit Berl College	Committees for Determining Principles and Rules for Online Courses	Head
2008 – 2012	Beit Berl College	School of Education	Deputy head
2008 – 2012	Beit Berl College	The Curriculum Committee, School of Education	Chair
2008 –	Beit Berl College	The committee of studying English for academic purposes	Head
2013 – 2019	Beit Berl College	Faculty Council	Member
2008 – 2018	Beit Berl College	The College Academic Council	Member
(*) 2012 – 2018	Beit Berl College	The Center for Teaching Enhancement	Founder and Head
(*) 2015 – 2018	Beit Berl College	Erasmus+ project: TeachEx – Teaching excellence in Israel	Head Project
(*) 2015 – 2020	Beit Berl College	Developing Team of M.Ed. in Integrative STEM Education	Head
(*) 2019 – 2021	Beit Berl College	M.Teach. for Secondary Education	Head
(*) 2021 –	Beit Berl College	M.Ed. in Integrative STEM Education	Head
(*) 2021	Beit Berl College	Developing Team of teaching certificate program in Data Analytics	Head
(*) 2024	Beit Berl College	Developing Team of B.Ed. in Data Analytics	Member

5. Scholarly Positions and Activities Outside Academic Institutions

a. Reviewing for international peer – reviewed academic journals and conferences

- ITiCSE – Conference on Innovation and Technology in Computer Science Education
- SIGCSE The ACM Technical Symposium on Computer Science Education (20

- The ACM Transactions on Computing Education (TOCE), Journal on Educational Resources in Computing
- ACM Inroads – Educational research in advancing computing
- InSITE – Informing Science and IT Education
- ISSEP – Informatics in Schools: Situation, Evolution and Perspectives
- IOI – OLYMPIADS IN INFORMATICS
- Journal of Studies in Educational Evaluation
- Mentoring & Tutoring: Partnership in Learning
- Education Sciences
- Computers & Education

b. Positions Outside academic institutions

Dates	**Institution / Organization**	**Activity**	**Appointment**
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
1988 – 1998	Katznelson High School, Kfar – Saba.	Teaching and developing the computer science study track	Teacher and head of the computer science studies track
1993 – 1995	Ministry of Education	Supervisor of computer science teachers from 70 high schools in the central district	Supervisor
2008	Ministry of Education, The Professional Committee for Teaching Computer Science	Professional advisor	Advisor
(*) 2019 – 2020	Sheatufim – Strategies for Social Impact	Enhancing computational thinking skills and STEM education	Member of the thinking team and consultant
(*) 2020 – 2021	Sheatufim – Strategies for Social Impact	Excellent promotion skills and computational thinking skills, applied through the STEM subjects, to middle school students with an emphasis on the periphery	Member of the thinking team and consultant

Dates	Institution / Organization	Activity	Appointment
		and unique populations – – the TOP15 initiative	
(*) 2021 – 2023	Ofanim – a non – for – profit organization 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
(*) 2024	Pedagogical Director – Department A for Education of Children and Youth at Risk	Implementation of Skills among students with learning disabilities and special education students	Advisor
(*) 2024 –	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

c. Doctoral review

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.

d. Research proposal review for MOFET Institute

- From 2013 – 2020, eight proposals.
- The last three were:
  - 2016, Perceptions and Styles of Online Instruction in a Multicultural Environment: Toward successful online collaboration
  - 2018, Three – Dimensional Learning Environments for Enhancing Creativity and Computational Thinking

- 2020, Investigating mathematics and/or physics Teachers as participators in their peers' professional growth

6. Participation in Scholarly Conferences

a. Active participation in international academic conferences

Date	Title of conference	Venue of conference	Role in conference	Presentation title
28 – 30, June, 2004	ITiCSE 2004	Leeds, UK	Poster	A Refreshing Approach to an Academic Seminar Course
23 – 27, February, 2005	SIGCSE 2005	St. Louis, MO USA	Paper presentation	On Understanding the Statics and Dynamics of Object – Oriented Programs
7 – 11, November, 2006	International Conference on Informatics in Secondary Schools— Evolution and Perspectives, ISSEP 2006	Vilnius, Lithuania	Tutorial presentation	Research – Based Guidelines for Teaching OOP
June 30 – July 02, 2008	ITiCSE 2008	Madrid, Spain	Paper presentation	Tutoring Model for Promoting Teaching Skills of Prospective Computer Science Teachers
4 – 7, March, 2009	SIGCSE 2009	Chattanooga, TN USA	Paper presentation	Preparation of High School Computer Science Teachers: The Israeli Perspective
c10 – 13, March, 2010	SIGCSE 2010	Milwaukee, WI USA	Paper presentation	A Survey of Computer Science Teacher Preparation Programs in Israel Tells Us: Computer Science Deserves Designated High School Teacher Preparation!
9 – 12, March, 2011	SIGCSE 2011	Dallas, TX USA	Paper presentation	A Study on Attitudes and Emphases in Computer Science Teacher Preparation
(*) 26 – 29, October, 2011	ISEEP 2011	Bratislava, Slovak Republic	Paper presentation	Pre – Service Computer Science Teacher Training within the Professional

Date	Title of conference	Venue of conference	Role in conference	Presentation title
				Development School Collaboration Framework
(*) 1 – 5, July, 2012	ITiCSE 2012	Haifa, Israel	Paper presentation	Integrating the Teaching of Algorithmic Patterns into Computer Science Teacher Preparation Programs
(*) 5 – 7, December, 2012	Doctoral consortium	Druskininka, Lithuania	Presenter and students tutor	Qualitative Research Methodology in CS Education: My Principles and Examples
(*) 6 – 9, March, 2013	SIGCSE 2013	Denver, Colorado, USA	Paper presentation	What is it We are Asking: Interpreting Problem – Solving Questions in Computer Science and Linguistics
(*) 2 – 4, July, 2013	The 6th International Conference on Teacher Education – Changing Reality through Education	The Mofet Institute, Israel	Paper presentation	Higher – Order Thinking Skills as Reflected in Keywords in Questions in Two (Considerably) Different Disciplines: Linguistics and Computer Sscience
(*) 5 – 8, March, 2014	SIGCSE 2014	Atlanta, GA USA	Paper presentation	STEM Teaching as an Additional Profession for Scientists and Engineers: The Case of Computer Science 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
(*) 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.
(*) 8 – 11, March, 2017	SIGCSE 2017 – Technical Symposium on	Seattle, Washington, USA	Paper presentation	On the (mis) Understanding of the "this" Reference

Date	Title of conference	Venue of conference	Role in conference	Presentation title
	Computer Science Education			
(*) 10 – 12, October, 2018	ISSEP 2018 – International Conference on Informatics in Schools: Situation, Evolution, and Perspectives	Saint – Petersburg, Russia	Paper presentation	A Diagnostic Tool for Assessing Students' Perceptions and Misconceptions Regards the Current Object "this"
(*) 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
(*) 24 – 26, June, 2019	The 7th International Conference on Teacher Education: The Story of Innovation in Teacher Education	The Mofet Institute, Israel	Round table presentation	Teachers' Attitudes Towards Using Online Assessment Tools to Diversify the Assessment Methods They Implement
(*) 24 – 26, June, 2019	The 7th International Conference on Teacher Education: The Story of Innovation in Teacher Education	The Mofet Institute, Israel	Paper presentation	Evaluating the Integration of Computers and Tablets in Teaching Students with Hearing Impairments
(*) 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
(*) 26 – 30, August, 2019	The 13th Conference of	Bologna, Italy	Paper presentation	Integrative STEM M.Ed. Degree Aligning with

Date	Title of conference	Venue of conference	Role in conference	Presentation title
	the European Science Education Research Association (ESERA)			Contemporary Perspectives in Academia and Industry
(*) 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
(*) 17 – 18, May, 2022	IOSTE – SSD – Science – Society – Didactics	Pedagogical University of Cracow (Poland)	Presentation	Assimilated mobile learning in teaching hearing – impaired students integrated into regular education in elementary schools in the Arab sector
(*) 5 – 6, July, 2022	The Wonders of STEM and STEAM Education: What, Why, and How?	The Mofet Institute, Israel	Paper presentation	Key Competencies as a Promoter of Integrative STEM Education
(*) 5 – 6, July, 2022	The Wonders of STEM and STEAM Education: What, Why, and How?	The Mofet Institute, Israel	Paper presentation	Leading Change in STEM Education: An Integrative STEM M.Ed. Program
(*) 14 – 16, December, 2022	The 9th Annual Conf. on Computational Science & Computational Intelligence (CSCI'22)	Las Vegas, USA	Paper presentation	A MOOC on Computational Thinking for All: Pedagogical Principles, Challenges, and their Application
(*) 11 – 12, May, 2023	ETE IV: STEM & Open Schooling for Sustainability Education,	Naturalis Museum, Leiden, Netherlands	Paper presentation	Educating the educators: an innovative M.Ed. program in Integrative STEM Education incorporating open schooling principles

Date	Title of conference	Venue of conference	Role in conference	Presentation title
	Educating the Educators			
(*) 26 – 27 June, 2023	The 8th International Conference on Teacher Education Passion and Professionalism in Teacher Education	The Mofet Institute, Israel	Paper presentation	The relationships among culture, pedagogical ideology, and educational change in Arab sector
(*) 26 – 27 June, 2023	The 8th International Conference on Teacher Education Passion and Professionalism in Teacher Education	The Mofet Institute, Israel	Paper presentation	Thinking and Understanding as 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	The Mofet Institute, Israel	Paper presentation	Thinking and Understanding as Expressed in Elementary Online Science and Technology Activities

b. Active participation in national academic conferences in Israel

Date	Title of conference	Venue of conference	Role in conference	Presentation title
(*) 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.

Date	Title of conference	Venue of conference	Role in conference	Presentation title
(*) 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?
(*) 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?

c. Conferences of the National Teachers' Center for Computer Science Teaching

(conducted in Hebrew)

Date	Title of conference	Venue of conference	Role in conference	Presentation title
1, April, 2001	The Curriculum of the 3rd Matriculation Exam Unit	Tel – Aviv University, Tel – Aviv, Israel	Paper presentation	Logic Programming
13, November, 2001	Recursion and Its Teaching to High School Students	Ramat – Gan, Israel	Paper presentation	Recursion Through Paradigm Glasses
13, December, 2001	The 2nd National Conference of CS Teachers	Shfayim, Israel	Paper presentation	Experience Teaching Object – Oriented Programming to Novices.
31, January, 2002	Software Design	Weizmann Institute of Science, Rehovot, Israel	Paper presentation	Computational Models as Abstract Data Types
11, March, 2003	Visualization and Animation Tools for Teaching CS	Weizmann Institute of Science, Rehovot, Israel	Paper presentation	BlueJ – A Visualization Tool for Teaching Object – Oriented Programming
25, June, 2005	Programming Paradigms	Tel – Aviv University,	Paper presentation	First Experience Teaching Computer

Date	Title of conference	Venue of conference	Role in conference	Presentation title
		Tel – Aviv, Israel		Science Foundations to High School Students using Java
28, December, 2005	The 6th National Conference of CS Teachers	Achva College, Israel	Paper presentation	Points of Contradiction Between Procedural Programming and Object – Oriented Programming When Using the New Programming Languages
17, December, 2006	The 7th National Conference of CS Teachers	Beit Berl College, Israel	Paper presentation	Teaching Guidelines for Teaching Object – Oriented Programming to Novices
29, December, 2008	The 9th National Conference of CS Teachers	Technion – Institute of Technology, Haifa, Israel	Paper presentation	Pedagogical – Disciplinary Tutoring of Prospective Computer Science Teachers
(*) 13, December, 2015	The 15th National Conference of CS Teachers	Beit Berl College, Israel	Paper presentation	The Self Object "this" – What are We Talking About?
(*) 26 – 28, June, 2017	Summer Seminar for Leading CS Teachers	Ramat Rachel, Israel	Presentation and workshop	Computational Thinking – About What, Why and how

d. Organization of conferences or sessions at conferences, international and national

Date	Title of conference	Venue of conference	Role in conference
(*) 3 – 5, July, 2012	ITiCSE 2015, the 17th Annual Conference on Innovation and Technology in Computer Science Education	Haifa, Israel International	Member of the conference committee, working groups coordinator
(*) 6 – 8, July, 2015	ITiCSE 2015, the 20th Annual Conference on Innovation and Technology in Computer Science Education	Vilnius, Lithuania International	Member of the conference committee, working groups coordinator
(*) 18, June, 2018	The 12th Annual ILAIS Conference – Association for Information Systems	Ashdod, Israel National	Head of session

Date	Title of conference	Venue of conference	Role in conference
(*) 22, March, 2021	The wonders of interdisciplinarity in STEAM education	The Mofet Institute, Israel	Conference chair (in co.) Head of plenary session and a panel session
(*) 5 – 6, July, 2022	The Wonders of STEM and STEAM Education: What, Why, and How?	The Mofet Institute, Israel	Conference chair (in co.) Head of plenary sessions, and a regular session

7. International Invited Lectures / Workshops

a. In academia

Date	Place of Lecture	The Inviter	Presentation title
(*) 5 – 7, December, 2012	Vilnius, Lithuania	Vilnius University	(1) CS Teachers Preparation Programs ~ in the World. Expand on the Israeli System and on Teachers Preparation Programs (2) Secondary School Computer Science Curriculum ~ World Survey. Expand on the Israeli CS Curriculum (3) Secondary School Computer Science Curriculum ~ World Survey. Expand on the Israeli CS Curriculum

b. For high school teachers

Date	Place of Lecture	The Inviter	Presentation title
31, June, 2004	Leads, UK	University of Leads, Workshop at the Annual Seminar for Computer Science Teachers	Object – Oriented Programming for High School Novices
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; (3) CS Teachers preparation Programs.
(*) 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

8. Research Grants

Year	Role in Research	Co – Researchers	Research Topic	Funded by/ Amount	Total funding	Resulting Papers
2003 – 2004	Senior research associate	–	A new approach to teaching academic seminar in computer science	Beit Berl College, Research Committee	12,000 NIS	*Hereby: 12.E.2.: 4*
2009 – 2010	Senior research associate	–	Pedagogical patterns when teaching recursion in computer science	Beit Berl College, Research Committee	12,000 NIS	*Hereby: 12.C.2.: 6*
2010 – 2011	Research associate	Dr. Gila Shilo	Analogies between logic programming and natural language argumentation texts	Beit Berl College, Research Committee	12,000 NIS	*Hereby: 12.C.1.: 8,9 12.C.2.: 8*
(*) 2014 – 2016	Senior research associate	Prof. Orit Hazzan; Dr. Gila Shilo; Dr. Ronit Shmallo; Dr. Osnat Dagan	STEM Teaching Problem solving in computer science and linguistics; Teaching of OOP; Integrating online learning tools in teachers training	Beit Berl College, Research Promotion Project	108,000 NIS	*Hereby: 12.B.1.: 2 12.C.2.: 9* *Hereby: 12.C.1.: 10,11* *Hereby: 12.C.2.: 10 12.D.2: 4* *Hereby: 12.D.1.: 2*

9. Scholarships, Awards and Prizes

Year	Role in Research	Co – Researchers	Research Topic	Funded by/ Amount	Total funding	Resulting Papers
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	M.Sc. thesis
2004	Senior research associate	Prof. Mordechai Ben – Ari	Teaching OOP to high – school novices	Department of Science Teaching's' Orly Kaplan Prize for Outstanding Ph.D. Student	8,000 NIS	Ph.D. thesis
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	*Hereby:* *12.C.1.: 2,3* *12.C.2.: 2* *12.D.2.: 1* *12.E.1.: 6*

10. Teaching

a. Courses taught in recent years (five years)

Beit Berl College, Faculty of Education

Year	Name of Course	Type of Course	Degree	Number of Students
2023 – 2024	Thinking strategies in data analysis	Course	Teaching Certificate for Data Science students	10
2021 – 2023	Analysis of interdisciplinary projects and research in industry and academia	Course	M.Ed. in Integrative STEM Education	10 – 15
2021 – 2023	PBL based development of STEM project	Course	M.Ed. in Integrative STEM Education	10 – 15
2021 – 2023	Expanding the disciplinary and interdisciplinary knowledge of STEM topics	Course	M.Ed. in Integrative STEM Education	10 – 15
2019 – 2020	Education and Teaching Research Seminar	Seminar	M.Teach.	25 – 30
2015 – 2020	Teaching in the Information Era Research Seminar	Seminar	M.Ed.	16 – 18
2017 – 2023	Computational Thinking	Course F2F & MOOC	B.Ed. and Teaching Certificate	15 – 40
2015 – 2023	Object – Oriented Programming	Course	B.Ed. and Teaching Certificate for CS students	15 – 20
2015 – 2023	Computational Models	Course	B.Ed. and Teaching Certificate for CS students	15 – 20
2020	Technological Pedagogical Innovation Emphasizing Mobile Learning	Course	M.Teach.	25

Year	Name of Course	Type of Course	Degree	Number of Students
2023 – 2024	Thinking strategies in data analysis	Course	Teaching Certificate for Data Science students	10
2021 – 2023	Analysis of interdisciplinary projects and research in industry and academia	Course	M.Ed. in Integrative STEM Education	10 – 15
2021 – 2023	PBL based development of STEM project	Course	M.Ed. in Integrative STEM Education	10 – 15
2021 – 2023	Expanding the disciplinary and interdisciplinary knowledge of STEM topics	Course	M.Ed. in Integrative STEM Education	10 – 15
2019 – 2020	Distance Teaching and Learning	Course	M.Teach.	25 – 45

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

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

b. Supervision of Graduate Students

Thesis track

Name of student	Title of thesis	Degree	Date of completion	Institution
(*) Vasel Haneen	Integrating computers and tablets in teaching and learning processes for students with hearing impairment. Approved September 2016, final grade: 91.	M.Ed.	2016	Beit Berl College

Name of student	Title of thesis	Degree	Date of completion	Institution
(*) Dubzinski Nurit	Examination of students' high levels thinking skills performances as reflected in using different online learning environments. Approved November 2019, final grade: 95.	M.Ed.	2019	Beit Berl College
(*) Morad Sigal	Research title: The relations between culture and educational – organization change: Implementing innovative pedagogy in an elementary school in the Arab sector as a case study.	Ph.D.	2018	Technion Institute of Science
(*) Vasel Haneen	Knowledge and attitudes of teachers who teach the "Computer Science and Robotics for Elementary School" curriculum in relation to conceptual and applied aspects.	Ph.D.	2021	Haifa University
(*) Blich Inbal	The cognitive factors involved in the 2D drawing process describing a 3D construction done by 5 – year – old kindergarten children. Approved September 2023, final grade: 90.	M.Ed.	2023	Beit Berl College
(*) William Fargun	From Euclid to Machine Learning: Computational thinking skills between technological innovation and traditional methods of learning.	Ph.D.	2023 –	Tel – Aviv University

Final Projects, Beit Berl College (non – thesis track in M.Ed. Programs)

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

11. Additional Professional Experience in academic institutions

Dates	Institution / Organization	Activity	Appointment
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
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
(*) 2020 – 2022	The MOFET Institute, A Center for the Research, Curriculum and Program	Headed team on interdisciplinary STEAM education	Head

Dates	Institution / Organization	Activity	Appointment
	Development in Teacher Education.		
(*) 2020 – 2021	Beit Berl College	Developed MOOC on Computational Thinking, approved by Digital Israel and The Israel Council for Higher Education	Developer and Lecturer
(*) 2022 – 2024	Beit Berl College & Samuel Neaman Institute, Technion & Ministry of Education	Embedding skills to promote excellence in STEM. Teacher training and teacher of teachers training.	Coordinator, Developer, and Head of the development team consisting of six senior faculty members
(*) 2024 –	Samuel Neaman Institute for National Policy Research at the Technion Israel Institute of Technology	International Round Table for Advancing STEM Excellence Skills	An active member of the discussions with around 30 participants of key Israeli and international organizations dedicated to advancing STEM education and skills acquisition
2024	The National Academy of Sciences	The committee on computational thinking and artificial intelligence	Consultant

12. Publications

(*) Since tenure position

For journal papers as available Scimago Journal & country Rank best Quartiles.

A. Ph.D. dissertation

Object – oriented programming instruction for high – school novices in Java

June 2004; 233 pages; Hebrew; Weizmann Institute of Science, Department of Science Teaching; Supervisor: Prof. Mordechai Ben – Ari

B. Books

B.1. Written with partners – three editions

1. (*) Hazzan, O., Lapidot, T., & **Ragonis, N.** (2011). *Guide to teaching computer science: An activity – based approach (*1st ed.). London, UK: Springer. (16 Chapters, 95 Activities, 247 p.) Link to full book
2. (*) Hazzan, O., Lapidot, T., & **Ragonis, N.** (2014). *Guide to teaching computer science: An activity – based approach (*2nd ed.). London, UK: Springer. (16 Chapters, 110 Activities, 285 p.) Link to book review
3. (*) Hazzan, O., **Ragonis, N.**, & Lapidot, T. (2020). *Guide to teaching computer science: An activity – based approach (*3rd ed.). London, UK: Springer. (18 Chapters, 153 Activities, 402 p.) Link to book content

B.2. Peer Reviewed Proceedings editing

1. (*) 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.
2. (*) **Ragonis, N.,** & Kinnunen, P. (2015). *Proceedings of the 2015 ITiCSE on working group reports*. ACM, New York, NY, USA. IS – 0.87

C. Peer reviewed articles

C.1. Published in peer reviewed journals

1. **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. Q1 – Computer Science (miscellaneous), Education
2. **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.
3. **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. Q2 – Education
4. **Ragonis, N.** (2010). A pedagogical approach to discussing fundamental object – oriented programming principles using the ADT SET. *ACM Inroads*, *1*(2), 42 – 52. Q2 – Computer Science (miscellaneous)
5. 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. Q2 – Computer Science (miscellaneous)
6. 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.

7. (*) **Ragonis, N.** (2012). Type of questions – The case of computer science. *Olympiads in Informatics, 6*, 115 – 132.
8. (*) **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. Q1 – Education
9. (*) Shilo, G., & **Ragonis, N.** (2014). Exposing the logical structure of natural language argumentation text by formalizing in logic programming. *Dapim, 57*, 55 – 82. [In Hebrew]
10. (*) **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. Q2 – Education
11. (*) 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. Q1 – Education
12. (*) **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. Q2 – Computer Science (miscellaneous), Education
13. (*) 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. Q1 – Education https://doi.org/10.1016/j.tate.2020.103193
14. (*) 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. Q1 – Education
15. (*) 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. Q1 – Education
16. (*) **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. Q1 – Education, Communication
17. (*) 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. 10.1145/3545109. Q1 – Computer Science (miscellaneous)
18. (*) **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. Q2 – Computer Science (miscellaneous)
19. (*) 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. Q1 – Linguistics and Language

20. (*) 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.* Q2 – Education

21. (*) Vasel, H., **Ragonis, N.**, & Kupermintz, H. (2024, in press). Cultural factors and pedagogical ideology in relation to leading organizational – educational change in Arab sector. *Social Issues in Israel*. [In Hebrew]

22. (*) Vasel, H., & **Ragonis, N.** (2024, in press). Perceptions of Mobile Learning for Students with Hearing Impairment in the Arab Sector: Insights from Students, Teachers, and Parents. *Special Education Research.* [In Hebrew]

23. (*) **Ragonis, N.**, Rosenberg – Kima R, & Hazzan O. (in press, 2024). The 4P4CT – Four Pedagogies for Developing Computational Thinking – Framework: Implementation in Preservice K – 12 Teachers Preparation Program. *Educational Technology Research and Development*. Q1 – Education

C.2. Published in the leading computer science education peer reviewed conference proceedings (ITiCSE – *Innovation and Technology in Computer Science Education*, and SIGCSE – *SIG on Computer science education*) [1]

1. **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.

2. **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.

3. Gal – Ezer, J., Hazzan, O., & **Ragonis, N.** (2009). Preparation of high school computer science teachers: The Israeli perspective. *ACM SIGCSE Bulletin, 41*(1), 269 – 270. SIGCSE 40th, Chattanooga, TN, USA, 4 – 7 March 2009.

4. **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.

5. (*) **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.

[1] In the field of CS in general and CS education in particular, it is customary to consider conference publications as journal publications. Articles in leading conferences have 4-6 reviewers, are at least 5,000 words long, and the acceptance rate is about 33%. See: "In computer science, papers in peer-reviewed conferences are accepted as high-quality scholarly articles. In fact, conference papers are arguably more prestigious than journal publications: oftentimes, conferences have higher standards and lower acceptance rates. This is the opposite of most other scientific fields." (University of Washington, https://homes.cs.washington.edu/~mernst/advice/conf-vs-journal-uscis.pdf)

6. (*) **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.
7. (*) 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.
8. (*) **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.
9. (*) 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.
10. (*) **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.
11. (*) **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.

D. Chapters in peer reviewed books

D.1. Invited refereed chapters

1. **Ragonis, N.** (2009). Computing pre – university: Secondary level computing curricula. In E. D. Benjamin & W. Wah (Eds.), *Wiley encyclopedia of computer science and engineering* (pp. 632 – 648). Hoboken, NJ: John Wiley & Sons.
2. (*) **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*, (pp. 15 – 41). Hershey, Pennsylvania: IGI Global.

D.2. Reviewed articles selected from conferences published as chapters in books

1. **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.
2. (*) **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.

3. (*) 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* (pp. 111 – 125). Dordrecht: Springer.
4. (*) **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.
5. (*) **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.
6. (*) **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.

E. Publications in reviewed conference proceedings

E.1. Peer reviewed papers

1. 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.
2. 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.
3. 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.
4. **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.
5. **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.

6. **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.

7. (*) **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.

8. (*) 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. [In Hebrew]

9. (*) 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.

11. (*) **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.

12. (*) 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.

E.2. Peer reviewed presentations

1. **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.

2. Israel National Center for Computer Science Teachers (2002). *"Machshava": The Israeli National Center for high school computer science teachers*. *Proceedings of the 7th Annual Conference on Innovation and Technology in Computer Science Education (ITiCSE)*. ITiCSE 7th, Aarhus, Denemark, 24 – 26 June 2002, 234.

3. **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* (pp. 224 – 224). ITiCSE 8th, Thessaloniki, Greece, 30 June – 2 July 2003.

4. **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.

5. **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. (Tutorial)
6. **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.
7. (*) 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.

F. Peer reviewed papers presented at conferences

1. **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, the Mofet Institute, 2 – 4 July 2013.
2. 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.
3. **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.
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.

G. Other scientific publications

G.1. Academic Programs

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

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

   Program curricula: Link

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

   Program website: Link

Program curricula: Link

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

   Program curricula: Link

G.2. Academic Blogs

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

G.3. Curriculum development

1. The Israeli Ministry of Education, Culture and Sports (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: Dr. Zahava Scherz, Prof. Ehud Shapira, Prof. Oded Shmueli, Naomi Liberman, **Noa Ragonis**.
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. **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.

G.4. Position papers

1. (*) **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.
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.**, 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

G.4. Publications of the National Center for Computer Science Teachers [In Hebrew]

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

G.5. High school textbooks [In Hebrew]

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

G.6. Scientific editing of high school textbooks [In Hebrew]

1. Man, S., Giladi, P., and Avrams, R. (2007). *Computer science foundations in Java and C# –* Part A. Mabat Lahalonot.
2. Man, S., and Avrams, R. (2009). *Computational models*. Mabat Lahalonot.
3. (*) Hardy, K. (2019). *Object – oriented programming*. Mabat Lahalonot.

H. Publications in review and in preparation

H.1. Publications currently under journals review

1. **Ragonis, N.**, & Hazzan O. (under review). Computational Thinking MOOC for All: Structure, Content, Pedagogy, and Assessment. Submitted to *Computer Science Education.* Q1 – Computer Science (miscellaneous), Education
2. Morad, S., **Ragonis, N.**, & Barak, M. (under review of minor revisions). Preservice teachers' definitions of innovative thinking and their self – perceptions as innovative thinkers. Submitted to *European Journal of Teachers Education*. Q1 – Education
3. **Ragonis, N.**, & Hazzan O. (under review). Taxonomy for the Interpretation of Computational Processes across Academic Disciplines and Age Groups: The Case of Prospective Teachers. Submitted to *Journal of Computers in Education.* Q1 – Computer Science (miscellaneous), Education

H.2. Publications currently in preparation on completed thesis research under my supervision

1. Blich, I., **Ragonis, N.**, & Dagan, O. (in preparation). Cognitive Factors in 5 – Year – Olds' 2D Drawings Depicting 3D Constructions: A Kindergarten Study. To be submitted to *Journal of Research on Technology in Education (JRTE)*. Q1 – Education
2. Dubzinski, N. & **Ragonis, N.** (in preparation). Analyzing Students' High – Level Thinking Skills Requirements in Science Online Learning Environments. To be submitted to *Thinking Skills and Creativity*. Q1 – Education