**Dan Ophir** Date (July. 2020)

CURRICULUM VITAE AND LIST OF PUBLICATIONS

1. **Personal Details**

Name: Dan Ophir

Place of birth: Wroclaw, Poland

Date of immigration: 7.1.1957

Regular military service (Academic Reserve): 1969-1975

Address and telephone number at work: Ariel University, P.O. Box 3, Ariel, 44837 ISRAEL +972 3-9066275

Address and telephone number at home: Hailtit 37 Str, Rrishon-Lezion,

7543879 ISRAEL tel.: +972-3-9612781, Cell.: +972-52-2551359

2. **Academic** **Education**

B.Sc. - 1964-1968, Israel Institute of Technology, Applied Mathematics M.Sc. - 1970-1972, Weizmann Institute of Science;

Computer Science Name of advisor: Prof. Amir Pnueli (of blessed memory)

Title of thesis: “SNOBOL+” a programming language, an extension of SNOBOL string-pattern matching to tree-pattern matching.

Ph.D. - 1976-1979, Weizmann Institute of Science, Israel; Computer Science

Name of advisor: Prof. Achi Brandt

Title of thesis: “LANGUAGE FOR PROCESSES OF NUMERICAL SOLUTIONS TO DIFFERENTIAL EQUATIONS – Grid Language (GL) and Grid System (GS)”;

Guest researcher 1980-1982 in GMD (Forschungszentrum Informationstechnik GmbH; from 1995: Gesellschaft für Mathematik und Datenverarbeitung mbH) Corporation for Mathematics and Data Processing Ltd., Sankt Augustine, Germany (currently named Fraunhofer SCAI).

3. **Employment History**

2001-2003 – Israel Air Craft Industry

- Responsibility of some aspects of the Image Processing

algorithms

2000-2001 - “NOVA” Corporation.

- Experience in the Semiconductors Industry - Developer.

1993 -2000 Ministry of Defense:

- Developer of software algorithms.

1984-92 El-Op Electrooptical Industry, Rehovot: Computer

Dept.,

- Developer of software algorithms;

1969-1976 Prime-Minister Office: Scientific Software

Coordinator

4. **Professional Activities**

1. Positions in academic administration

2014-2015 Bar-Ilan University, Computer Science Dept. Promoter of “Final Projects”

2011- Weizmann Institute of Science, Davidson Center, Promoting Pupils in their final projects for the “Maturity” test.

2009- Tenure Senior Lecturer: Ariel University of Samaria, Dept. of Computer Science and Mathematics.

2006-2014 Lecturer, Dept. of Software Engineering, Afeka Academic College of Engineering.

2003-2008 - Senior Lecturer: Ariel University of Samaria, Dept. of Computer Science and Mathematics.

- Lecturing: about 17 various lectures on the subject of Computer Science on various levels and versions, Promoting Students in their final projects and Master projects.

- Research – Algorithmic – used in different fields: Bioinformatics, Diffusion, Fluids, Games, Robotics, and Education.

- Administration – Chairman of the Computerization College Committee; Responsible for Computer Courses (2003); Preparing course Syllabuses and submitting them to the National High Level Education Committee (מל"ג ) for an approval of the B.Sc. title.

- Distinguished reward (2006);

* 1. - Computer's Consulter and Developer: "Multi Grid and Simulated Annealing Algorithms", Traveling Salesman algorithms 1/3 Position.

1982-1984, 1993-1994 Lecturer, Tel Aviv University, Computer Science and Mathematics Department: Teaching: Data Structures; programming Languages: LISP and SNOBOL.

1975-76 Ben-Gurion University - Department of the Nuclear Reactors - a counselor in computer's applications.

1974 -75 Weizmann Institute of Science - Computer's Department - an assistant of Professor A. Pnueli in lecturing of "Formal Languages".

(b) Professional functions outside universities/institutions

1. SCAI Guest Researcher- Fraunhofer Institute Algorithms and Scientific Computing, Sankt Augustin Germany, Director Prof. Dr. Ulrich Trottenberg. Connection to Dr. Klaus Stüben - professional exchange of information.

2. Consultant - Poznan - Poland University of Technology, Institute of Control and Systems Engineering - Prof. Waldemar Wroblewski, Connection to Prof. K. Kozlowski; Collaboration with Prof. dr. hab. Eulalia Skawinska, Dept. of Industrial Management.

3. Collaboration with Dr. Amos Gera, ELTA Israeli Aircraft Industry.

4. Member in the committee of International Institute of Informatics and Systemic (IIIS) 2011.

(c) Significant professional consulting

- Computer Adviser: Nuclear Engineering Div., Ben Gurion Univ., Beer-Sheva Collaboration with Prof. Yigal Ronen and Prof. Venia Adair, (1975-1976) 1/3 time position,

- Scientific Adviser and Researcher: Mathematics Dept. -"Institute für Mathematik, Gesellschaft für Mathematik und Datenverarbeitung", MbH, Bonn, Germany (1980-1982) full time position.

- Computer's Consulter and Developer: "Multi Grid and Simulated Annealing Algorithms", Traveling Salesman algorithms (1982-1995) 1/3 and later 1/5-time position,

- Bio-Informatics Researcher (2002-2010) - Weizmann Institute of Science Department of Molecular Cell Biology.

(d) Editor or member of editorial board of scientific or professional journal

D. Ophir, Member in International Institute of Informatics and Systemics - IIIS’s member Reviewer.from 2012.

D. Ophir Member of Legilingwistyka porównawcza (Polish) – Comperative Legilinguistics (International Journal for Legal Communication), Institute of Linguistics, Faculty of Modern Languages and Literature, Adam Mickiewicz University, Poznań, Poland, since 2013

D, Ophir Member of Information Science Reference (an imprint of IGI Global), Hershey, PA, USA 17033, since 2015.

(f) Membership in Professional Societies

D. Ophir, Member in the IDREC 2012 (Interdisciplinary Research, Education, and Communication) Program Committee, held in Orlando, Florida, USA, on March 25th - 28th, 2012.

D. Ophir, Member in the KGCM 2012 (Knowledge, Generation, Communication, and Management) Program Committee, held in Orlando, Florida, USA, on July 17th - 20th, 2012.

D. Ophir, Member in the KGCM 2012 (Knowledge, Generation, Communication, and Management) Program Committee, will be hold in Orlando, Florida, USA, on July 9th – 12th, 2013.

D. Ophir, Member of the new Advisory Editorial Board of the Multi-disciplinary JSCI - Journal of Systemics, Cybernetics and Informatics, March, 2014.

5. Academic Activities

(a) Courses taught (undergraduate)

1. Numerical Analysis (Electrical Dept., Ariel University),
2. Computerized Graphics (Bar-Ilan Univ.)
3. Image processing (Bar Ilan Univ.),
4. Data Structures (Ariel Univ.),
5. Algorithms (Tel Aviv Univ.),
6. Data Base (Bar Ilan Univ., Ariel Univ. Afeka Academic College of Engineering),
7. Programming Languages: Lisp, Snobol (Tel-Aviv Univ.)
8. C (Programming Language) (Elect. Eng. Dept. and Comp. Science and Math. Dept. - Ariel Univ.);
9. C++ (Programming Language) Ariel Univ.;
10. Java (Programming Language) Ariel Univ.;
11. Visual Basic (Programming Language) Ariel Univ.;
12. MATLAB (Infrastructure Dept. - Programming Language);
13. Visual Basic (Industry and Management Dept. Ariel Univ.),
14. Data Warehouse (Industry and Management Dept. Ariel Univ.),
15. Data Mining (Industry and Management Dept. Ariel Univ.),
16. Requirements Engineering (Afeka Academic College of Engineering)
17. Operating Systems (Afeka Academic College of Engineering),
18. Workshop for Computer’s Acquaintance (Dept. Computer Science and Engineering, Ariel Univ.),
19. Workshop for Computer’s Acquaintance (Dept. of Economy, Ariel Univ.),
20. Projects’ Workshop, (Dept. Computer Science and Mathematics, Industry and Management Dept. Ariel Univ.)
21. Projects’ Promoter (Afeka Academic College of Engineering)
22. Projects’ Promoter (Dept. of Computer Science and Mathematics, Bar Ilan University)
23. Projects’ Promoter – Davidson Institute, Weizmann Institute of Science, Rehovot, Israel.
24. Numerical Analysis (Talpiot Educational Academic College, 2016-2017)
25. Mathematical Objects and their computer’s representation (Talpiot Educational Academic College, 2017-2018).
26. Expert Systems (Ariel University, Industrial Management Dept. 2016-2018)
27. Courses taught (graduate)
28. Requirements Engineering (Afeka Academic College of Engineering 2012-2016)
29. Data Mining (Ariel University, Computer Science Dept. 2016-)

Totally: 28 different courses relevant to Computer Science and Industrial Management)

1. Research students

* Mr.Marcus von Couver, Graduated 1980, B.Sc.. in GMD, University of Bonn, Joint with Ulrich Trottenberg.
* Mrs. Maya Radian, M.Sc., University of Ben-Gurion 2005, Joint with M. Zinigrad and D. Eliezer
* Mr. Ahiya Davidovitch, Graduated 2011 B.Sc. Ariel University, Ariel.
* Mr. Itzhak Schlissel, University Ariel,2019.

1. Guidance of more than ***500*** students on the academic level in their final projects in the following academic institutions: University Ariel (Computer Science, Industrial Management, Electronic Engeeniring) , Academic College Afeka, University Bar-Ilan, Davidson Center at Weizmann Institute (replacing the matriculation exams).

6. **Awards, Citations, Honors, Fellowships**

(a) Honors, Citation Awards

1. Sessions’ Best Paper Award – Session Knowledge Generation Communication and Management III; Summer 14th and 16th, International Conference on Knowledge Generation Communication and Management.
   1. D. Ophir, ***Simplifying Complex Problems***; The 14th World Multi-Conference on Systemic, Cybernetics and Informatics, June 29th-July 2nd, 20010~Orlando, Florida, USA; KGCM - Proceedings Vol. VIII p.35. <http://www.iiisci.org/journal/CV$/sci/pdfs/RO092AR.pdf>
   2. D. Ophir, ***Evaluating Scientific Work by Means of Diffusion.*** KGCM 2012 Summer - Knowledge Generation Communication Management in the context of the 16th. World Multiconference on Systemics, Cybernetics and Informatics (WMSCI 2012), to be held in Orlando, USA, on July 17th - 20th, 2012. The paper has been selected as the best paper of those presented in its session.
   3. D. Ophir, ***A Model of Inter and Multi-Disciplinary Domains, and their Mutual Interactions,*** 17th World Multiconference on Systemics, Cybernetics and Informatics WMSCI DeMset-2013 Orlando, USA, on July 9-12, 2013; The article has been selected as the best paper of those presented in its session.
2. D. Ophir, ***Traffic analysis: improving the education to its caution and safety***

בטיחות בדרכים, שיפור  חינוך לזהירות ולבטיחות בדרכים

Grant 20000 ₪ is given by the Research Authorities at the Ariel University,

May, 2012.

1. Certificate of Honor, for Dr. Dan Ophir’s contribution in promotion of the research in the Afeka Academic College of Engineering, during the 2011-2012.
2. Certificate of Keynote Speech in the “International Conference on Education and Social Development [ESD2017], October 20-22, 2017, Xiamen, CHINA.
3. Certificate of Appreciation for commitment and dedication as a ENTOR in the 2018 HACK-AU COMPETITION, Ariel University May 1-2, 2018.

7. **List of Publications**

1. Conferences
2. Achi Brandt and Dan Ophir, ***GRIDPACK: Toward Unification of General Grid Programming,*** Söderköping, Sweden - IFIP TC Working Conference on PDE Software: Modules, Interfaces and Systems: 22-26 August, 1983, Eds.: B. Enquist and T. Smedsaas, Elsvier Science Publishers B.V. (North-Holland) @ IFIP, 1984.
3. Oded Arnon, Steve Bloomberg and Dan Ophir, (Tel-Aviv 99). ***Computer Generated Hologram used as an Aberration Corrector***, Tel-Aviv: the Sixth Meeting in Israel on Optical Engineering; AEAI - Association of Engineers and Architects in Israel, Israel National Council for Research and Development, Chairs/Editors: Rami Finkler, Joseph Shamir, pp. 102-108.
4. Z. Shiler and D. Ophir, (Tel-Aviv, 2004).***Computing a Set of Local Optimal Paths over Terrain*** Tel-Aviv IE&M 13th Industrial Engineering and Management;
5. Z. Shiler, Yusuke Fujita, D. Ophir and Yoshihiko Nakamura, (New Orleans 2004). Computing a Set of Local Optimal Paths through Cluttered Environments and Over Open Terrain, Proc. of IEEE ***International Conference on Robotics & Automation*** (ICRA-2004), pp. 4759-4764:, New Orleans, LA, April, 2004.
6. D. Ophir, A. Yahalom, G. Pinhasi and M. Kopylenko, ***A Combined Variational & multi-grid Approach to Fluid Simulation***, (Barcelona 2005) ADMOS 20005 – International Conference on Adaptive Modeling and Simulation; .P. Diez and N.E. Wiberg (Eds) pp. 295-304.
7. A. Yahalom, G.A. Pinhasi and M. Kopylenko, D. Ophir**,** ***FLUIDEX as a Tool for Aerodynamics Education*** (9-12, Jan, 2006); AIAA - 44-th Aerospace Science Meeting held in Reno, Nevada, USA,
8. D. Ophir, A. Yahalom and M. Kopylenko, (2006) ***Substituting the Relaxation byVariation in Multigrid Cycling Schemas***; WCCM VII – World Congress on Computational Mechanics, in UCLA, California, USA, 16-22 July, 2006;
9. M. Radune, D. Ophir, A. Lugovskoy, M. Zinigrad, D. Eliezer , ***A Sulfur Diffusion Investigation in Metal and Oxide Phases; DSL-II 2nd International Conference on Diffusion in Solids and Liquids***; Aveiro - Portugal, 26-28 July, 2006.
10. Alexander Domoshnitsky and D. Ophir (2006); ***A New Approach Using Numerical Methods Solving Integro - Differential Equations***; the Academic College ofJudea and Samaria MMT-2006, 44837, Ariel, Israel. Sept. 2006.
11. Dan Ophir, Amos Gera (2006), ***Coursewares' Generating; ITRE International Conference on Information Technology Research and Education***, AFEKA Tel-Aviv Academic College of Engineering, ISRAEL .
12. Dan Ophir, (2007), ***Calculus - its Dynamical and Visual Description,***(“ ***תיאורו הדינאמי והוויזואלי- חשבון דיפרנציאלי ואינטגראלי”),***the annual conference those who are occupied in teaching, research and development in mathematics for high schools in Israel - 26.3.2007.<http://kesher-cham.technion.ac.il>
13. ד. אופיר, מ. אללי, נ. גדול***, מה משותף לכלכלה, אלקטרוניקה, תורת המשקים ועוד?!***

John Braude , ***Development of Initiatives for Promoting Learning in Higher Education***; ORT Braude College, Carmiel, Israel, **May 31, 2007**.

1. Dan Ophir, Itzhak Schlissel, Benyamin Tamir, ***Body Movement Identification*** (BMI), (ECIW-2007) The 6th European Conference on Information, Warfare and Security; Defence College of Management and Technology, Shrivenham, UK, 2-3 July 2007;
2. Dan Ophir, ***Creating Visualized Decision Support Tools in Economics, Electronics, Games-theory and others; Subjective Probability, Utility, and Decision Making***. SPUDM, Warsaw, POLAND, 19-23 August, 2007.
3. D. Ophir, ***Calculus in its Dual Algorithmic Mode for Educational Purpose***; "ContemporaryIssues in Higher Education Pedagogical aspects of emerging methodologies in higher education” The Academic College of Judea and Samaria 44837, Ariel, Israel. 3-6 Sept. 2007.
4. D. Ophir, ***Computerized Simulation as a Tool in the Pedagogical Methodology***;"ContemporaryIssues in Higher Education - Pedagogical aspects of emerging methodologies in higher education”, The Academic College of Judea and Samaria 44837, Ariel, Israel. 3-6 Sept. 2007.
5. D. Ophir, A. Yahalom, G.A. Pinhasiand M. Kopylenko*,* ***Recruiting MLAT and Lagrangian – Variations Principle Creating a Fluid Dynamics Solver***;U.S National Congress on Computational Mechanics,(USNCCM9) San Francisco, CA, Jul 19, 2007 - Jul 27, 2007.
6. A. Domoshnitsky, Ya Goltser, D. Ophir, ***Numerical Approach to Studying of Integro\_Differential Systems***. International E-Conference on Computer Science (IeCCS) 2006, Lecture Series on Computer and Computational Sciences Volume 8, 2007, pp. 493-496, Editor-in-Chief and Founder Theodore Simos.
7. D. Ophir, ***Logical Mosaic – its Generation for Developing Intelligence and its Conservation***

ד. אופיר***, פסיפס לוגי -מחוללו, לפיתוחה ושימורה של האינטליגנציה;***

***הכנס הרביעי: "יוזמות לקידום הלמידה במוסדות*** ***ההשכלה הגבוהה",***

מכללת אורט בראודה, כרמיאל 27.5.10

1. D. Ophir and A. E. Gera, ***Calculus: the Dynamical and Visual Description***; The 12th World Multi-Conference on Systemic, Cybernetics and Informatics, June 29th-July 2nd, 2008~Orlando, Florida, USA; KGCM - Proceedings Vol. VII p.141.
2. D, Ophir, ***BMI – Body Movement Identification***; The Conference of the Homeland Society. June 1, 2010, Ariel University Center of Samaria. Israel; The Technologies for Remote Sensing, Detection and Imaging;
3. D. Ophir, ***Simplifying Complex Problems***; The 14th World Multi-Conference on Systemic, Cybernetics and Informatics, June 29th-July 2nd, 20010~Orlando, Florida, USA; KGCM - Proceedings Vol. VIII p.35. (Distinguished presentation in its session).
4. D. Ophir, ***MDSS – Management Decision Simulating System – for Solving Conflicted Situations***; The 14th World Multi-Conference on Systemic, Cybernetics and Informatics, June 29th-July 2nd, 20010~Orlando, Florida, USA; KGCM - Proceedings Vol. VIII p.19.
5. D. Ophir, ***Walking Language Recognition***; The 4th Conference of the International Society for Gesture Studies, July 25-30,2010, European University Viadrina Frankfurt/Oder, Germany, ISGS Proceedings: Gesture, Evolution, Brain and Linguistic Structures; p.340-342.
6. D. Ophir, ***Logic Mosaic Generation for Developing and Conservation;*** KGCM 2011, The 15th World Multi-Conference on Systemic, Cybernetics and Informatics, July 19th-July 22nd 2011, Orlando, Florida, USA;
7. D. Ophir and Z. Shiler, ***Homotopic Classes of Paths: Connecting two Points in 2D Discrete non-Simple Spaces;*** Israeli-Polish Mathematical Meeting, September 11th-15th, 2011,   Łódź, Poland.
8. D. Ophir, ***DDDL: A Descriptive, Didactic and Dynamic Programming Language***; Israeli-Polish Mathematical Meeting, September 11th-15th, 2011,   Łódź, Poland.
9. A. Domoshnitsky, Ya. Goltser, D. Ophir , ***Investigating stability of integro-differential systems using numerical methods;*** Israeli-Polish Mathematical Meeting, September 11th-15th, 2011,   Łódź, Poland.
10. D. Ophir, ***Research, Design and their Mutual Interactions ;*** DRANS 2011, Design and ResearchIn Artificial and Natural Sciences in the context of 15th World Multi-Conference on Systemic, Cybernetics and Informatics, July 19th-July 22nd 2011, Orlando, Florida, USA;
11. D. Ophir, ***Treating Amblyopia with Computer Generated 3D Images.*** ISER-International Society for Eye Research -2012, July, 21-25, 2012, Berlin, Germany.
12. D. Ophir, ***Computerized Cognitive Behavioral Therapy (CCBT).*** EABCT- European Association for Behavioral and Cognitive Therapy, August 29-th, 2012, Geneva, Switzerland, 2012.
13. L. Mesika, D. Ophir, ***The Griddlers Game***. ITiCSE-2012, The 17-th Annual Conference on Innovation and Technology in Computer Science Education, Technion – Technological Institute of Science, Haifa, Israel, 3-5 July, 2012.
14. D. Ophir, ***Evaluating Scientific Work by Means of Diffusion.*** KGCM-2012 Summer - Knowledge Generation Communication Management in the context of the 16th. World Multiconference on Systemics, Cybernetics and Informatics (WMSCI 2012), Orlando, USA, on July 17th - 20th, 2012. The paper has been selected as the best paper of those presented in its session, and it has been selected to be included in 10% the Journal of Systemics, Cybernetics and Informatics (SCI).
15. D. Ophir, ***Computerized Legalinguistics and Psychology - Overriding the Polygraph’s Drawbacks,*** Eighth Conference on Legal Translation, Court Interpreting and Comparative Legilinguistics, Poznań, Poland , June 28-30, 2013.
16. D. Ophir & I. Pumerantz (2012) ***Stammering Reduction Tool Development***, presented at an exhibition of MILBAT Tel-Hashomer Hospital Association, <http://www.milbat.org.il/English/Pages/default.aspx>
17. D. Ophir, ***A Model of Inter and Multi Disciplinary Domains,    and their Mutual Interactions,*** 17th World Multiconference on Systemics, Cybernetics and Informatics WMSCI DeMset (Design and Modeling in Science, Education, and Technology) - 2013 Orlando, USA, on July 9-12, 2013; The article has been selected as the best paper of those presented in its session.
18. D. Ophir***, iCBT Supported by Quantitative-Semantics,*** the 17th World Multiconference on Systemics, Cybernetics and Informatics (WMSCI 2013)- Special Track on Knowledge Generation, Communication and Management (KGCM, 2013), Orlando, USA, July 9-12, 2013.
19. D. Ophir, ***An Analysis of Palindromes and n-nary Tracts' Frequencies Applied in a Genomic Sequence***, International Conference Integrative Biology Summit-2013 Publishing OMICS Group Inc., August 5-7, 2013, Embassy Suites Las Vegas, USA (Chairman); J Data Mining Genomics Proteomics 2013, 4:4
20. D. Ophir and Dotan Dekel, ***SNOBOL-Tone - the Sound Pattern-Matching Programming Language,*** 2013 Speech Processing Conference on July 2, 2013 at the Afeka Academic College of Engineering.
21. D. Ophir, ***Picture Steganography in the Cloud Era*** International Conference on Cloud Security Management – ICCSM 2013, Seattle, USA, 17-18 October. 2013.
22. D. Ophir and Z. Shiler, ***Homotopic Classes of Paths: Connecting two Points in 2D Discrete non-Simple Spaces;*** icr2013 – Israeli Conference on Robotics, The Israeli organization of Robotics, Dan Panorama, Tel-Aviv, ISRAEL. November 19th-20th, 2013.
23. D. Ophir, ***An Analysis of Palindromes and n-nary Tracts' Frequencies Applied in a Genomic Sequence*,** International Conference DNA and Genome Day; World’s Dream of Bio-Knowledge Economy – WDD-2014 Dalian, China, 25-28 April.
24. D. Ophir, ***Projects Chosen Models as Appendices of the SRS - Software Requirement’s Specifications***; מודלים נבחרים של פרויקטים כנספחים למסמך דרישות (Hebrew), The conference of “Software Engineering Tutorial Industry Oriented”, Kinneret College, Kinneret, Israel, 18-nth February, 2014.
25. D. Ophir, ***DDDL: a Description, Didactic and Dynamic Programming Language, (Hebrew),*** The 12-th Israeli conference of Meytal – IUCEL, Levinsky College, Tel-Aviv, ISRAEL, June, 4-th, 2014. 2014 הכנס הארצי השנתי השנים עשר של מיט"ל
26. D. Ophir, ***Ranking the authenticity of social network members,*** European Conference on Social Media ECSM 2014, 10-11 July 2014, Brighton, United Kingdom.
27. D. Ophir, M. Kanovsky, E. Checnoverov and D.\_Klausner, ***The P53 gene – its tracts representations liaison to Cancer, investigated as a private case of a general sequence research*,** ICRC – Israeli Cancer Research CenterConference 21-th, May 2014, Ariel University, Ariel, Israel**.**
28. D. Shklovsky and D. Ophir, ***Computerized Infrastructure for a Dermatology,*** בכנס המחקר הראשון אסותא- מכבי, ביום חמישי ה - 18/12/2014 במלון הילטון תל-אביב,  The first research conference of the Israeli ASSUTA-Maccabi Association, Hilton Hotel, December 18-th, 2014.
29. D. Ophir, ***Teaching Data mining through Games***, The third Kinneret Conference on Software Engineering Education, Achi Racov Engineering School, Kinneret College on the sea of Galilee, February 17th, 2015.
30. D. Ophir***. Students’ Introjections of the DDDL - A Descriptive, Didactic and Dynamic Programming Language*;** The 5-th conference “Initiative for Promoting Learning in Higher Education, Ort Braude College, May 28-th, 2015.
31. Dan Ophir and Zhi Jie (Jeffrey) Zheng, ***A Sociable Robot as a Psychotherapist*,** RoMoCo-2015 - 10th International Workshop on Robot Motion and Control , conference, Poznan University of Technology, Poznan, Poland July, 6-8, 2015.
32. Dan Ophir and Arie Lazar, ***The Derivatives of Computerized Cognitive Behavioral Therapy – iCBT Methodology***, 45-th EABCT (European Association for and Cognitive Therapy) Congress August 31- September 3, 2015 Jerusalem, Israel.
33. Dan Ophir, ***Evaluating the Globalization/Integration of Teaching/Learning by Means of Diffusion;*** A conference on:Quality, Mobility, and Globalization in the Higher Education System – A Comparative Look at the Challenges of Academic Teaching, September 7-9, 2015, Ariel University, Israel.
34. Dan Ophir, ***Supervising Final Projects as an Instrument in Programming Skills Developing;*** The 4-th Kinneret Conference on Software Engineering Education (Chairman), February 6-th 2016.Kinneret, Israel.
35. Dan Ophir, Piotr Wiśniewski, ***Evaluation of Social Networks*;** ECSM16 3rd European Conference on Social Media; 12 - 13th July 2016, Caen, France, <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2747170>
36. Dan Ophir, Piotr Wiśniewski and Rama Badash***, Experiments in Software Engineering – Demonstration on the Assessment of the Social Network*** (Heb. ***הדגמה על מערכת להערכת רשת חברתית ניסויים בהנדסת תוכנה -***); AEAI – Israeli Association of Engineers, Architects and Academics in the Technological Professions; The Second Conference on the Experimental Engineering 6-th April, 2017, Bar-Ilan University, ISRAEL.
37. Dan Ophir, ***A Sociable Robot as a Language Teacher (Heb. רובוט חברתי בתור חיית מחמד להקניית השפה***) The Israeli Association for Literacy and Language, July 6-th, 2017, The Open University, Raanana, ISRAEL.
38. Dan Ophir, ***Logical Mosaic***: ***A New Methodology for Intelligence Development and Retention,*** 2017 International Conference on Education and Social Development (ESD2017), October 20th-22nd, 2017, Xiamen, China (Keynote Speaker), Open Ceremony, Wanshou Hall, 3F (3 楼万寿厅).
39. Dan Ophir, ***Experiments/Trials in the Software Engineering in Expert Systems (Heb.*** *ניסויים בהנדסת תוכנה ב- מערכות מומחה****),*** AEAi-2018 – Engineering and Architects Association in ISRAEL; The 3-th Conference on engineering Experiments, March 22-nd, 2018, The Engineer House,200 Dizengof Str., Tel-Aviv, ISRAEL.
40. Hila Samuel, Itzik Shmuelov, Dan Ophir and Iris Reychav*,* ***Item’s Localization Expert System, Ambulance Medicaments Example (Heb. מערכת מומחה ג'נרית להתמצאות באוספי פריטים גדולים, מודגמת על אוסף תרופות באמבולנס),*** 12th ILAIS Conference June 18, 2018 Sami Shamoon College of Engineering, Ashdod, ISRAEL.
41. Dan Ophir, ***Homeland Language Acquisition by Technological Means, based on “Expert Systems” (Heb.***

***) רכישת שפת אם באמצעים טכנולוגיים המבוססים על "מערכות מומחה"***

A conference on ***“***Literacy and Language” (Heb. ***(אוריינות ושפה*** conference, Tel Aviv University, ISRAEL, June 11, 2018.

1. Dan Ophir***, Guided “Expert Systems” as a Model of Imitation in Teaching Children (Heb. "מערכות מומחה" מונחות, כמודל לחיקוי בהוראת ילדים)*** National conference, Summer 2018 3/7/2018, Gordon the Academic College¸
2. Dan Ophir, Hila Samuel, Itzik Shmuelov, and Iris Reychav ***Classification of Guided Expert Systems According to Their Accuracy, Domain Resolution, and Range,*** 19th European Conference on Knowledge Management (ECKM 2018), 6 – 7 September 2018, University of Padua, ITALY (Chairman).
3. Dan Ophir, ***Multi-Level Adaptive Technique (MLAT), Solving Traveling Salesman Problem,*** 19th European Conference on Knowledge Management (ECKM 2018), 6 – 7 September 2018, University of Padua.
4. Dan Ophir and Osnat Argaman*,* ***Language and Society in the Age of Social Networks;*** The Israeli Association for Language and Society Research, Tel-Aviv University, Israel Tel-Aviv 24-th June 2019.
5. Dan Ophir and Ahiya Davidovitch, ***Planning TS trajectory using MLAT in o(n log n),*** RoMoCo – 12-th International Workshop on Robot Motion and Control, 8-10 2019 July. **Poznaǹ University of Technology, Poznaǹ.**
6. **Dan Ophir and Itzhak Schlissel, *Simulating Homeland Language Acquisition of a Child by the Computer, הדמיית רכישת שפה על ידי מחשב ,*** The Israeli Association for Literacy and Language, the 13-theenth conference, Achva College of Education, 9-th July 2019.
7. Dan Ophir, Piotr Wiśniewski and Doron Greenberg, ***Sharing Knowledge Data to avoid and reduce disasters,*** 20th European Conference on Knowledge Management 5–6 September 2019, Universidade Europeia de Lisboa, Lisbon, Portugal.
8. Dan Ophir and Itzhak Schlissel; ***How do we acquire our homeland language?!*** 20th European Conference on Knowledge Management 5–6 September 2019, Universidade Europeia de Lisboa, Lisbon, Portugal.
9. Dan Ophir***, Intellectual Capital – a third Party’s Point of View,*** 21th European Conference on Knowledge Management 2–4 December 2020, University of Coventry, UK (accepted).
10. Dan Ophir, ***Three Modes of Emotional Expression,*** 7th GESPIN Conference, September 7-9, 2020, Department of Speech, Music and Hearing, KTH Royal Institute of Technology in Stockholm, Sweden (Submitted).

**Authored books**

**b) Books Chapters**

1. D. Ophir, ***Steganography Encoding as Inverse Data Mining,*** A chapter in a book:  ***“***Research and Applications in Global Supercomputing” pp.264-288, Eds. Dr. Richard S. Segall and Dr. Qingyu Zhang; published by: Information Science Reference (an imprint of IGI Global) in Feb. 2015; <http://www.igi-global.com/book/research-applications-global-supercomputing/118093#table-of-contents> (1 citation);
2. D. Ophir, ***Visualization and Storage of Big Data for Linguistic Applications;*** A chapter in a handbook: “Big Data Storage and Visualization Techniques”, Eds. Dr. Richard S. Segall, Jeffrey S. Cook,and Dr. NehaGupta; Accepted, to be published by Information Science Reference (an imprint of IGI Global) February 2018.

<https://www.igi-global.com/book/handbook-research-big-data-storage/179829>

Handbook of Research on **Big Data Storage and Visualization Techniques**, published by **IGI** Global: Visual Analytics and Interactive Technologies: **Data**, ...

**Articles**

1. **Refereed articles and refereed letters in scientific journals - running numbers**
2. **D. Ophir A. Gera, *Analysis of n-nary tract frequency in the genome.* OJB- Online Journal of Bioinformatics, 6 (2) 149-161, 2005, October 2005.** [**http://www.comcen.com.au/~journals/tractabs2005.htm**](http://www.comcen.com.au/~journals/tractabs2005.htm) **(4 citations).**
3. **M. Radune, D. Ophir. A. Lugovskoy., M. Zinigrad, D. Eliezer, *A Sulphur Diffusion Investigation in Metal and Oxide Phases*, Defect and Diffusion Forum Vols. 258-260, January 2007 (4 citations).**
4. **D. Ophir, *The methodology solving economical conflicts*, in “Impact of Globalization on development and economic growth”, Monograph, Ed. Tomasz Brzeczak, pp. 7-15 (Poland, Poznan University of Technology, 2010).**
5. **D. Ophir; *How to compete in the Marketing and in the Market?!* (in polish: *Jak Konkurować w Marketingu i na Rynku Zbytu?!) ,* Journal:Marketing i Rynek (Poland, Poznan, Dec. 2010, pp. 52).**
6. **D. Ophir; *Simplifying Complex Problems*; (Dec. 2010 in Journal of Systemics, Cybernetics and Informatics).**
7. **D. Ophir, A. Yahalom, G.A. Pinhasi and M. Kopylenko “**[***A Combined Variational and Multi-Grid Approach for Fluid Dynamics Simulation***](https://owa.ariel.ac.il/owa/redir.aspx?C=28e0310cdcf547a69ef06dca85d2df0a&URL=http%3a%2f%2fwww.icevirtuallibrary.com%2fcontent%2farticle%2f10.1680%2feacm.2012.165.1.3)***”* Proceedings of the ICE - Engineering and Computational Mechanics, Volume 165, Issue 1, 01 March 2012 , pages 3 –14 , ISSN: 1755-0777, E-ISSN: 1755-0785.**
8. **D. Ophir and Z. Shiller, *Homotopic Classes of Paths: Connecting two Points in 2D Discrete non-Simple Space.* Journal of Homotopic Homology Applications, 2012.**
9. **D. Ophir, *Evaluating Scientific Work by Means of Diffusion.* KGCM-2012 Summer - Knowledge Generation Communication Management in the context of the 16th. World Multiconference on Systemics, Cybernetics and Informatics (WMSCI 2012), has be held in Orlando, USA, on July 17th - 20th, 2012. The paper has been selected as the best paper of those presented in its session and it has been selected to be included in 10% the Journal of Systemics, Cybernetics and Informatics (SCI).**
10. D. Ophir, ***An Analysis of Palindromes and n-nary Tracts' Frequencies Applied in a Genomic Sequence***, J Data Mining Genomics Proteomics 2013, 4:4.
11. **D. Ophir, *Computerized Legilinguistics and Psychology - Overriding the Polygraph’s Drawbacks* (2014),Legilingwistyka porównawcza (Polish) – Comperative Legilinguistics (International Journal for Legal Communication), Institute of Linguistics, Faculty of Modern Languages and Literature, Adam Mickiewicz University, Poznań, Poland, Volume 15/2013 pp. 33-52.**
12. **D. Ophir, *An Analysis of Palindromes and n-nary Tracts' Frequencies Applied in a Genomic Sequence*, Journal of Computer Science & Systems** Biology; Journal of Data Mining in Genomics & Proteomics; Research article, 2013, 4: 140, [10.4172/2153-0602.1000140](http://dx.doi.org/10.4172/2153-0602.1000140), <http://www.omicsonline.org/an-analysis-of-palindromes-and-nnary-tract-frequencies-found-in-a-genomic-sequence-2153-0602.1000140.php?aid=19599>
13. **Dan. Ophir, *A Model of Inter and Multi-Disciplinary Domains, and their Mutual Interactions****,* Journal of Systemics, Cybernetics and Informatics, Vol. 12, Number 1, Year 2014. <http://www.iiisci.org/journal/sci/FullText.asp?var=&id=DW389CK13>
14. **Dan Ophir**, ***Classification of Guided Expert Systems According to Their Accuracy, Domain Resolution, and Range,* Journal of Business and Economics, Academic Star Publishing Company (to be published Aug.-Sept. 2020).**
15. **Dan Ophir, *The Crown for the “Coronavirus”,*** Academic Journal of Engineering Studies (April 2020), Crimson Publishers, <https://crimsonpublishers.com/aes/pdf/AES.000511.pdf> (Manuscript **ID:**AES-20-OP-804)

* **Lectures and Presentations at Meetings and Invited Seminars not Followed by Published Proceedings:**









**Seminar, School of Software Yunnan University, Kunming China, 30-th April, 2014, Game Theory and Popular Games,**

1. **“Art and Science” (Pln. “Sztuka i Nauka”) , a lecture given in “Beit Warszawa” – a Reformed Synagogue in Warsaw. Poland (June, 10-th, 2015).**
2. **“Architecture and Mathematics” – a lecture presented in the frame of advanced studies of the Ariel University’s Senior staff, The David Hotel, the Death Sea, February, 2013.**

**Reviewing (last two years):**

1. **This is to certify that DAN OPHIR, who has been known to the Editorial Board as a highly appreciated expert and a scholar dealing with legal language and translation, has reviewed an article titled ADDRESSING THE NEEDS OF LAWYERS IN LEGAL ENGLISH: A COMPARATIVE STUDY IN FOUR EUROPEAN UNION COUNTRIES for Comparative Legilinguistics (ISSN 2080-5926) vol. 33/2018.**
2. **Journal of King Saud University – Computer and Information Sciences (Elsevier 2019).**
3. **Quality Practices in Curriculum Evaluation - a Snapshots of Various Countries (IDREC 2019, conference).**
4. **Advanced Digital Image Steganography Using LSB, PVD, and EMD: Emerging Research and Opportunities; (IGI Global’s Editorial Advisory Review Board).**
5. **Impact of Family Support and Perception of Loneliness on Game Addiction: Analysis of a Mediation and Moderation; (IGI Global’s Editorial Advisory Review Board).**
6. **CORES OF NORMAL EDGE-TRANSITIVE CAYLEY GRAPHS OF FROBENIUS GROUPS;** (**IGI Global’s Editorial Advisory Review Board** <http://www.scirp.org/>) ;
7. ***Cybernetics Applied to Plato’s Theory of Forms: An Experiment;* KCST-** Knowledge and Cognitive Science and Technologies, 13-16 Sep. 2020.

**Received Grants:**

1. ***Traffic analysis: improving the education to its caution and safety;*** Institution: Ariel University, 20,000 NIS, 1.11.2012-30.10.1013.
2. ***Developing and checking computerized tool for diagnostic styles of cognitive distortions.*** Institution: Ariel University, 18,000 NIS, 1.3.2015-1.3.1016.

Published scientific reports and technical papers

1.

**GRIDPACK: Toward Unification of General Grid Programming**

Achi Brandt and Dan Ophir,

Department of Applied Mathematics

Weizmann Institute of Science

Rehovot, Israel.

Appeared in: PDE SOFTWARE: Modules, Interfaces and Sysytems

Eds.: Benquist and T. Smedsaa,

Elsvier Science Publishers B.V. (North-Holland)

@ IFIP, 1984

**Explanation**: Developing a language and a package for solving partial differential equations.

2.

**Computer Generated Hologram used as an Aberration Corrector**

Oded Arnon, Steve Bloomberg and Dan Ophir,

El-Op Electro-Optics Industries Ltd.

P.O.Box 1165, Rehovot, 76110 Israel

Appeared in: Proceedings:

The sixth Meeting in Israel on

Optical Engineering

Eds.: Rami Finkler, Joseph Shamir,

19-21 December 1988,

Tel-Aviv, Israel.

**Explanation**: Developing a method and using to create a CGH (Computer Generated Hologram). Transforming a description of a Polynomial surface into contours of height lines.

(f) Unrefereed professional articles and publications

1. דן אופיר, מאיר יעקוביאן, ***ביומטריה***, עמ' 10 הביטחון, גיליון 19, יולי-אוגוסט 2007;
2. דן אופיר, מאיר יעקוביאן, ***זיהוי אדם על פי טביעת אצבעותיו,***  הביטחון, גיליון 21, ינואר-פברואר 2008, עמ' 16

1. דן אופיר, ***זיהוי אדם על תנועות גופו,*** הביטחון, גיליון 22, מרץ-אפריל 2008, עמ' 27
2. דן אופיר, ***אירן הגרעינית ותורת המשחקים*** News1 (2010)

<http://www.news1.co.il/Archive/003-D-35417-00.html?tag=08-40-16>

1. דן אופיר ***"צדק עדתי" - וחינוך מגיל שלוש, תהיות****,* News1 (26/01/2012),

<http://www.news1.co.il/blog/dano/>

1. דן אופיר, ***פרדוקס תקיפת פתע – בהקשר האיראני,*** הביטחון, גיליון 48, נובמבר-דצמבר 2012, עמ' 48; [www.habitachon.co.il](http://www.habitachon.co.il)
2. דן אופיר, ***מ-"צ'כי" לצ'כיה,*** הביטחון, גיליון 49, ינואר-מרץ 2013, [www.habitachon.co.il](http://www.habitachon.co.il).
3. Dan Ophir, ***Mój wrocławski obszar*** (Polish) ***(המרחב שלי בוורוצלב – My space in Wroclaw)*** in “Tak było …”, (“So it was …”) pp. 173, Ed. Prof. Krzysztof Krasuski (Wrocław 2013), Edition Oficyna: wydawnicza ATUT Wroclawskie wydawnictwo oświatowe, ISBN-978-83-7432-939-2

(g) Classified articles and reports

1. מערכת תוכנה **SYM-DES (Symbol Design)** קביעת מיקומם האופטימאלי של הסימולים על הקסדה.

דו"ח 43-01-1283 (1986)

**הסבר**: נתונה קסדה: יש למקם סימנים על הקסדה. זיהוי הסימנים יקבע את מצבה של הקסדה. התוכנית עונה על השאלה מהו המספר המינימאלי של הסימנים המספיק למטרה הנ"ל.

2.

אלגוריתמי מכ"ם -

דו"ח פנימי 2002, אלת"א.

**הסבר**: בתחום עיבוד תמונה: רגיסטרציה.

3.

**מערכת תוכנה** **CADIC**

1. חשוב ה-TOLERANCE בקביעת מיקומם של מדי הנטיה ליחצ"ג,

2. המלצות כלליות לפתוח תוכנה.

אל-אופ דו"ח פנימי 1652 30.1.86

**הסבר**: חישוב האפיצות של מכשיר מדידה על סמך הדיוק הנדרש מחישובים שונים הניתנים על סמך נתוני המדידה של המכשיר. המטרה לרכוש מכשור אופטימלי מבחינת cost/performance.

4.

**מערכת SURFACE** :מציאת טרנסםורמציה אופטימלית המעבירה משטח נתון אחד למשנהו.

אל-אופ: דו"ח פנימי מס' 1654 . 1.3.86

**הסבר**: הטרנספורמצי היא טרנספורמציות Euler המערכת מוצאת את הפרמטרים המתאימים.

5. מערכת תוכנה **FRONT**: מציאת חזית גל אופטימלית של גל מוחזר.

1.3.86

**הסבר**: נתונה חזית גל ונתון מושור מנודף - התוכנית מוצאת את משואת החזית המוחזרת.

7. סימולצית **Resolvers** יולי 86.

**הסבר: Resolvers** הנם מכשירים שבעזרתם קובעים את מיקומו ואת מצבו של גוף קשיח במרחב. מערכת התוכנה מסמלצת את פעלותו של המכשיר ומטרתה לנתח במחשב את אפיצויות של המכשיר ותכונות אחרות שלו על סמך התוצאות הנדרשות ממנו.

8. אינטרפולציה בזמן אמת של פונקציות סינגיולריות

דו"ח פנימי 1739 (12/1/87)

**הסבר**: קים מכשיר מדדיה אופטי מדויק יחסית המודד יש לשפר את דיוקו על ידי אינטרפולציה תוך כדי פעולתו ובהתחשב בנקודות "מתות" סינגיולריות.

האינטרפולציה נעשתה על ידי עידון הנתונים המתקבלים בקרבת הנקודות הסינגיולריות.

9. מתודולוגיה Michael Jackson, לפיתוח מערכות (סקירה)

דו"ח פנימי 1724 (15.2.87) .

**הסבר**: פותחה גישה חדשה לניתוח מערכות - הדו"ח מתאר כלי המבוסס על השיטה הנ"ל.

10. מערכת תוכנה **FIELD** לטיפול בשדה וקטורים.

דו"ח פנימי מס' 1755. (22/2/87).

**הסבר**: מערכת תוכנה ג'נרית לבצוע פעולות אלגבריות על וקטורים כגון: טרנספורמציה,

פתרון משואות אלגבריות לינאריות, מכפלה וקטורית, סקלרית וכו'.

11. ניתוח תרמי של מוטות ליזר גליליים הנתונים בפעולת שאיבה קצביות חוזרות.

דו"ח פנימי 1731 (22/2/87)

**הסבר**: פתרון משוואה דיפרנציאלית חלקית המתארת את הדיפוזיה במוט גלילי עבור זרימה מעגלית נתונה.

12. "NIDUFIM" מערכות תוכנה לתכנון שכבות דקות,

דו"ח סכום ביניים - מפעל אופטיקה, ענף פתוח טכנולוגיות.

11.1.88

**הסבר**: על סמך דרישות ההחזרה והקליטה מרכיב אופטי - פתחתח מערכת המסוגל לחשב את סוג החומרים שיש לנדף (סוג של שיטת צפוי) ואת עובי שכבתם האופטימלי על מנת לקבל את התכונות הנדרשות.

13**. Laser Microlithography**

Technical Report 749902-1890

עם Dr. Allan Farber

**הסבר**: פתוח מערכת Software/Hardware המכילה שולחן אופטי בעל 3-דרגות חופש,

מקור ליזר, מיקרוסקופ, ,shutter מחשב - פתחתי מערכת השולטת על הרכיבים הנ"ל ובקבלת נתונים של השרטוט היא משרטטת בעזרת קרן ליזר לוח שנתות.

14. The PRSM : an Euclid Application for Prism Manufacture

(Mini manual)

דו"ח מחלקתי 18.3.88

**הסבר**: תוכנית אפליקציה בתיב"ם (solid modeling) המגדיר פעולות האופיניות לפעולות חיתוח פריזמות. חישוב אופטימיזציה של כמות חומר הגלם על מנת לצמצם את כמות הפסולת.

15. נתוח הפרמטרים לדפינת עדשות.

במשותף עם ד"ר רמי פינקלר

תחילת 1990.

**הסבר**: מערכות אופטיות מורכבות מרכיבים אופטיים:עדשות פריסמות ומרכיבים מכניים המחזיקים את הרכיבים האופטיים. עד לזמן הפיתוח לא היתה קיימת תוכנה המשלבת את חישובי האפיצות של הרכיבים האופטיים והמכננים במשולב פה נעשה נסיון מוצלח של שלוב החישובים הרלוונטיים.

16. תכנון אוטומטי לכלי ליטוש.

1987 אל-אופ

**הסבר**: לשם ייצור סדרת עדשות בכמות מסחרית מתכננים מתכננים כלים דמויי "כפות"

קמורה ושקועה לליטוש העדשות. התוכנה מקבלת את מידות העדשה ומוציאה את שרטוטי כלי ליטוש

17. תוכנה ישומית בתחום תיב"מ מכני

הנושא: קטלוג קשיחים.

A הכנסת ספרית קונקטורים לפי MIL-C-5320/55 עד MIL-C- 5320.66 (1.6.90)

B קונקטורים D-type (8,8,90)

**הסבר**: הרכיבים האלקטרוניים נוסף לתכונות האלקטרוניות הם כמובן גם בעלי מבנה פיסי הרשום בטבלאות. כאן נעשתה עבודה של בנית ספרית מודלים (תיב"מ) של הרכיבים הנ"ל. המתכנן המכני בזמן תכנון המכשיר היה שולף מתוך הספריה, על סמך המק"ט (מספר קטלוגי) את המודל עצמו וכך היתה נחסכת עבודת בנית הרכיב על ידי המתכנן המכני.

18. יעול--Data-Bases

דו"ח פנימי - מערכת הביטחון (1993).

**הסבר**: שיטות יעילות של חיפוש ב-DataBases על ידי הגדרת טבלאות ו-אינקסים בהתאם לצרכי המשתמש.

19. חישובים בליסטיים

דו"ח פנימ מערכת הביטחון (1995).

**הסבר**: התחשבות במקדם גרר .

20. סימולצית פרוטוקולי E1/T1 - תיקשורת Voice.

דו"ח פנימי - 1997

**הסבר**: E1/T1 הם פרוטוקולי תיקשורת טלפוניה בקצבים גבוהים. נבנתה רשת פנימית המסמלצת את התיקשורת הנ"ל המאפשרת אלגוריתמים של שליפה והשתלת נתונים בערוצי

ה-user.

21. אופטימיזצית מיקום רכיבים אלקטרוניים-

דו"ח פנימי 1997-

**הסבר**: מתכנני רכיבים - כרטיסים אלקטרוניים משתמשים בכלי תיב"ם אלקטרוניים.

העבודה היא דו"ח של פיתוח תוכנה המחשבת את מיקומם האופטימלי של הרכיבים כדי ללמזער את אורכי המסלולים ואת כמות הצמתים בלוח.

22. חישוב זמן דעיכה של פולס מודם.

ד"ח פנימי 1998

**הסבר**: חישובי rise time, settling time, overshoot בפולסי מודם.

23. אופטימיזציה של חיתוך דגימות על מצע - חיסכון בפסולת.

דו"ח פנימי 1999-

**הסבר**: נתון חומר גלם בצורת מלבן בעובי מסוים - יש לקבל צורות נתונונות מחומר הגלם עם חיסכון מקסימלי בפסולת.

24. מינימיזציה של זמן תנועת כלי רכב.

דו"ח פנימי - 2000

**הסבר**: נתונה מפת הכבישים ומיקומם של כלי רכב ויעדיהם - יש לתכנן את מסלול נסיעתם של כלי הרכב באופטימיזציה מבחינת זמן הנסיעה ומרחק.

25. זהוי פגמים בתמונה -

דו"ח פנימי - 2001

**הסבר**: נתון צלום של רכיב אלקטרוני בהגדלה 1:1000 התוכנה בודקת ניתוקים ובגמים בייצור הרכיבים.

**Submissions for grants:**

1. ***The use of Information Technology in psycho-social treatment;*** The office of the Social Relief (2011).
2. ***Use of wavelets in the extraction of the features of the speech signals for the processing of the speech in an arbitrary language with the emphasis on tonal languages;*** the Science Office (2011)

1. ***An Integrative computerized tool for improving intelligence and self esteem;*** the Science Office (2012), in the frame of: The Program for the development of Scientific and Technological Infrastructure in the Field of Brain Sciences 2013 (Pending Submission)
2. ***Comparison of the efficiency of the mathematics lecture’s components in e-learning among the high school’s pupils and among the students;*** The Office of Education (2012) (No. 10) (Pending Submission).

• **Lectures and Presentations at Meetings and Invited Seminars not Followed by Published Proceedings**

(a) Invited plenary lectures at conferences/meetings

1. Köln – University of Bonn & GMD (Germany Bonn – 80, 81),

Organized by Prof. Ulrich Trottenberg (GMD);

(b) Presentation of papers at conferences/meetings (oral or poster)

The same list as proceedings

(c) Presentations at informal international seminars and Workshops

1. A. Brandt and D. Ophir, (79) ***GRIDPACK*** , 10-days workshop on Multi-Grid Algorithms (USA, New-Haven, Yale University, Summer 79);

(d) Seminar presentations at universities and institutions

1. D. Ophir, ***Multi-Grid GRIDPACK***, Stockholm – Hogskola University Aeronautics Dep. (Sweden – August 83);

• **Patents**

1. **Sudoku –** The popular game; submitted as a provisional USA Patent (March 2007)**;**
2. "**Massive Defect Detections**" **-** in a patent for "**massive defect detections**" in a machine produce by NOVA Corporation and based on the algorithm (2001).

• **Research Grants**

1. M.Sc. Scholarship in the Feienberg Graduate School at the Weizmann Institute of Science (1969-1972)
2. Ph.D. Scholarship in the Feienberg Graduate School at the Weizmann Institute of Science (1974)
3. Worked with Prof. Achi Brandt on the Grant received from the USA Air Forces (1980).

• **Synopsis of research, including reference to publications and grants in above lists**.

GRIDPACK – developing a package for solving partial differential equations, as a simulation of wind tunnel.

• **Present Academic Activities**

1. ***Speech Recognition***, participation with the cooperation Speech Modules and an expected grant from “Magneton” (Ministry of Industry and Commerce). Expected date of completion: 2112.
2. ***Stammering Reduction Tool Development***, participation with Mr. Itzhak Pumerantz (Afeka College), expected support MILBAT association ביה"ח תל השומר .עמותת מילב"ת
3. ***MDSS - Management Decision Simulating System - for Solving Conflicted Situations,*** the subject was chosen as the best lecture in its session in the KGCM-2010 conference,participation student: Eti Shpirer preparing her final project,
4. ***Computerized Cognitive Behavioral Therapy (CCBT).***

• **Additional Information**

1. **Coordinator – Computer Science Division:** Preparation of Syllabuses, Teaching Program, Lecturers placement (2003-2007);
2. **Chairman of Computerization Committee (2003-2005):** Collaboration: College; the Manager of the Computer Center; the Researchers, the Lectures and the Management Division of the College.
3. **Supervising** students 2003- in Computer Science, Software Engineering, Electrical Engineering and Industrial Management in the final projects.
4. **Scientific Reviewing:**
   1. ***Clash in Civilizations? Or Cash in Cultures***.Proceedings of WMSCI 2007
   2. ***Research of Factors the Pollutants Ozone and Affect To Cultivation the Esparragos'*** . Proceedings of WMSCI 2007.
   3. ***Delay efficient Layer by Layer Angle Based Flooding Protocol (L2-ABF) for Underwater Wireless Sensor Networks***. Proceedings of Information and Communication Technologies and Applications (ICTA) 2012.
   4. ***Assess urban vulnerability in Iranian old city toward earthquake using GIS/Fuzzy logic.*** Proceedings of Information and Communication Technologies and Applications (ICTA) 2012.
   5. ***Examining factors influencing knowledge sharing behavior in natural resources management program managers in the Okavango delta: test of three models,***KGCM-2013.
   6. ***Time and Frequency Resource Allocation using Graph Theory in OFDMA Wireless Mesh Networks****,* IMETI-2013
   7. ***The Disability theory – the pedagogical Innovation in Communication of Learning and Educational Success,* Journal of Systemics Cybernetics and Informatics (JSCI), Nov. 2016** [**www.iiis2016.org/wmsci**](http://www.iiis2016.org/wmsci)
   8. ***“Linguistic fingerprints” in the criminal procedure, –* Comperative Legilinguistics (International Journal for Legal Communication), Institute of Linguistics, Faculty of Modern Languages and Literature, Adam Mickiewicz University, Poznań, Poland (2016),**
   9. *Faculty management after the university reform - organization design of the faculties of two universities considering their effectiveness.* 20.9.2019.<http://www.iiis-spring20.org/idrec/reviewers.asp>
   10. ***An Analysis of Game Mechanics Preference among Bartle’s Four Player Types,*** International Journal of Game-Based Learning (IJGBL) (2018).
   11. ***Holistic Development of Undergraduate Students – Concept Cartoons to Authentic Discovery, CK242274 (2018)***
   12. CORES OF NORMAL EDGE-TRANSITIVE CAYLEY GRAPHS OF FROBENIUS GROUPS, LU YU QI CAI AND HUA ZHANG. [emily@reviewerteam.com](mailto:emily@reviewerteam.com), Scientific Research Publishing (2018)
   13. ***Students’ Acceptance of Gamification in Higher Education,*** International Journal of Game-Based Learning (IJGBL) (2018)
   14. ***Optimization driven cluster based Indexing and matching for the document retrieval,*** Journal King Saud University, Computer and Information Sciences, Copyright © 2018 Elsevier B.V. (2018).
   15. ***Quality Practices in Curriculum Evaluation -*** ***a Snapshots of Various Countries,*** IMCIC conference***,***  [***http://www.iiis-spring19.org/idrec/reviewers.asp***](http://www.iiis-spring19.org/idrec/reviewers.asp)(2019
   16. *Game-Based Learning:*

*Board Games as a Series of Entrepreneurship Learning Process,2019.* [*https://www.igi-global.com/publish/contributor-resources/samples/erb-review/*](https://www.igi-global.com/publish/contributor-resources/samples/erb-review/)*.*

* 1. *Personalized learning model in upper level courses teaching,* 2020, IDREC, [imcic-reviewers@mail.imcic2020.org](mailto:imcic-reviewers@mail.imcic2020.org)
  2. ***Investigating the role of virtual social networks in non-syllabus***

***studies,*** 2020, IDREC, [imcic-reviewers@mail.imcic2020.org](mailto:imcic-reviewers@mail.imcic2020.org)

* 1. ***Can Video Gameplay Improve Undergraduates’ Problem-Solving Skills?*** 2020***,*** International Journal of Game-Based Learning (IJGBL)