

CURRICULUM VITAE

Name: Shabtay Shayke Bilu

Date & place of birth: December 7, 1961, Kefar Hanagid, Israel.

Citizenship: Israeli.

Marital status: Married +3.

Affiliation: SCE - Shamoon College of Engineering, 84 Jabotinsky Street, Ashdod, 7724500.

Tel: +972-8-6475699

E-mail: shaykebilu@gmail.com E-mail: shaykbi@sce.ac.il

Residence address: 138 Hela St. Farm 15, Moshav Kefar Hanagid, 7687500, Israel.

Tel: +972-8-9421291 Mobile: +972-54-6543598.

Military service:

1980-1981 I.A.F. Fighter Aircraft technician.

1981-1982 I.A.F. Missile & Ammunition Battalion Officer (Lieutenant).

1982-1984 I.A.F. Missile & Ammunition Brigade Officer (Captain).

1984-1986 I.A.F. Head of Missile & Ammunition Section Officer (Major).

1986-1988 Deputy Head of Personnel Standards Mechanisation Section at the Air Force Headquarters (Major)

1989-2006 I.D.F. Reserve Officer (Major).

2006- Reserve duty exempt.

1. Academic education

2010-2015 Ph.D. in Management in Education. Anglia Ruskin University, Chelmsford, U.K. Dissertation title:
"Stakeholders' perceptions of appropriate management methods:

The case of A. youth-village undergoing changes "

Advisers: Dr Simon Pratt-Adams, Dr Jaki Lilly and Prof Gary Peckham.

1998-1999 M.Ed. in Management in Education. Derby University, Derby, U.K.

Dissertation title:

"The perception of the employees involved in a technological and educational organisation concerning the appropriate management method for the organisation "

Advisers: Dr Ohela Avinir, Dr Hanna Bar Yishay.

1997-1998 B.A. in Psychology & Education. Burlington College, Vermont, USA.

Dissertation title:

"Review and comparison of therapeutic approaches: Psychoanalytic, Behavioural, Cognitive and Biomedical relation to the treatment of phobias".

Advisers: Prof Gabriel Kovac, Dr Merav Hermesh and Mr Yair Vana.

1986-1991 Senior Teaching Diploma (Number 334) in Computer Science and Data Technology. Teachers College of Technology, Israel.

Permanent Teaching License (Number 33557), in Computer Science and Data Technology. Ministry of Education, Israel.

2. Academic Employment

- Since 2018, Senior Lecturer, Academic Advisor, departmental seminar coordinator, academic teaching committee member, head of the final projects committee, computer courses coordinator and student mentor in final projects in the mechanical engineering department, B.Sc. SCE - Shamon College of Engineering, Israel.
- 2008-2021 Adjunct Lecturer, Software Practical Engineering Department, ORT REHOVOT College.
- 2008-2018 Adjunct Lecturer, Electrical and Electronics Engineering, Software Engineering and Mechanical Engineering Departments, B.Sc. SCE - Shamon College of Engineering, Israel.
- 2008-2018 Adjunct Lecturer. Software Engineering and Mechanical Engineering Departments, Design and Technology Centre. Ariel University, Israel.
- 2001-2007 Adjunct Lecturer. Business Management Department, College of Business Management and Teachers College of Technology, Israel.
- 1995-2001 Lecturer at Information Technology and Computer Science Departments, TCT-Teachers College of Technology, Israel.
- 1989-1995 Lecturer at Information Technology and Computer Science Departments, College of Business Management Technology Centre, Israel.

3. Industrial and Managerial experience

- 2004-2007 Head of Student and Academic Staff Administration, Security Officer, and Member of Discipline, Purchases, and Human Resource Committees. Teachers Technology College, Israel.
- 2000-2004 Head of Student Administration, Security Officer, and Member of Discipline, Purchases, Communication, and Human Resource Committees. Teachers Technology College, Israel.
- 1993-2000 Head of management team and coordinator of the computers department at the College of Management's Technology Centre, Israel.
- 1989-1993 Management staff senior member, Security Officer, Member of Discipline. College of Management Technology Centre, Israel.
- 1981-1988 Head of Missile & Ammunition Section Officer. IAF - Israeli Air Force, Israel.

4. Academic research and development activities

4.1. Recent research areas

- Integrating Large Language Models into Physical Robotics Education via Project-Based Autonomous Vehicle Development.
- Students' Outcomes in Design & Development Mechatronics Systems Project-Based Course.
- Students' Outcomes in MATLAB Software Programming Project-Based Course.
- Students' Outcomes in Python Software Programming Project-Based Course.
- Students' Outcomes in the Theory of Machines Project-Oriented Course. (Research at work).
- Students' Outcomes in Introduction to Robotics Project-Based Course. (Research at work).
- Survey of College Lecturers of Project-Oriented/Digital Learning Courses. (Research at work).

- Lecturers' feelings towards distance synchronous teaching during the Corona crisis (Research at work).
- Development of Educational Master Plan for 2020 in "Gan Raveh" Regional Council, Israel.
- Laptop computer usage for students and teachers in the "Gan Raveh" Regional Council, Israel.
- Development of a new scientific technology centre, an innovative educational approach and enrichment programs in the "Gan Raveh" Regional, Israel.

4.2. Previous research and development activities

- 2025 - Integrating Large Language Models into Physical Robotics Education via Project-Based Autonomous Vehicle Development
- 2024 - Students' Outcomes in Python Digital course, SCE - Shamoon College of Engineering, Israel - **The paper was accepted for the 13th European Conference on Education (ECE2025), July 10–14, 2025 | SOAS & University College London, UK.**
- 2024 - Students' Outcomes in Python Software Programming Project-Based Course - **Awaiting feedback on the article from the Proceedings of the Third International Conference on Computer Science, Cyber Security and Information Technology (ccit2025), India.**
- 2023 - "Students' Outcomes in MATLAB Software Programming course", SCE - Shamoon College of Engineering, Israel - **Awaiting feedback on the article from the Proceedings of the Third International Conference on Computer Science, Cyber Security and Information Technology (ccit2025), India.**
- 2022 - Students' Outcomes in Autonomous Robotic Systems course, SCE - Shamoon College of Engineering, Israel - **Awaiting feedback on the article from the Proceedings of the Third International Conference on Computer Science, Cyber Security and Information Technology (ccit2025), India.**
- 2018 - "Students' Outcomes in Design & Development Mechatronics Systems course", SCE - Shamoon College of Engineering, Israel.
- 2008 - Research and Development Educational Master Plan for 2020, a Joint Venture with "Tovanoth" in "Gan Raveh" Regional Council, Israel
- 2007 - Community Research Coordinators for the Construction of a multi-year educational project in the "Gan Raveh" Regional Council.
- 2007 - Enterprise software revenue proposals, "Ofek of Science and Technology": Laptop computer usage for students and teachers in the "Gan Raveh" Regional Council, Israel.
- 2006 - Research and Development of the new Scientific Technology Centre, an innovative educational approach and enrichment programs in the "Gan Raveh" Regional Council, Israel.

4.3. Other relevant activities

- 2021-2024 "Education that breaks boundaries" with Rabi Shay Piron at "Gan Raveh" Regional Council, Israel.
- 2015-2016 "Updated the Regional Council Educational Vision". "Gan Raveh" Regional Council, Israel.

- 2005-2007 Enterprise software revenue proposals, "Ofek of Science and Technology", Laptop computer usage by students and teachers. "Gan Raveh" Regional Council, Israel.
- 2000-2004 Community Computer Needs Committee Coordinator for the computer program for educational institutions, the regional council, parks, schools, libraries, and community centre - "Gan Raveh" Regional Council, Israel.

5. Grants and awards

5.1. Awards

- 2024 – Students' Graduation project - An autonomous sowing robot for sprouting tables - won the Dean's Outstanding Award.
- 2023 - Students' Graduation project - Planning, design and manufacturing a skateboard with motion sensors - won the Dean's Outstanding Award.
- 2021 - Students' Graduation project - A device system for horizontally transferring a patient between hospital beds - won the Dean's Outstanding Award.
- 2020 - Students' Graduation project - Assistive glasses for the visually impaired - won the Dean's Outstanding Award.
- 2019 - Unique academic excellence contribution remuneration - SCE - Shamon College of Engineering, ASHDOD, Israel.
- 2019 - Outstanding Lecturer - SCE - Shamon College of Engineering, ASHDOD, Israel.
- 2019 - Outstanding Lecturer - ORT REHOVOT College, Israel.
- 2018 - Outstanding Lecturer - SCE - Shamon College of Engineering, ASHDOD, Israel.
- 2017 - Outstanding Lecturer - ORT REHOVOT College, Israel.
- 2017 - Outstanding Lecturer - Ariel University, ARIEL, Israel.
- 2016 - Outstanding Lecturer - SCE - Shamon College of Engineering, ASHDOD, Israel.
- 2016 - Outstanding Lecturer - ORT REHOVOT College, Israel.
- 2013 - Outstanding Lecturer - ORT REHOVOT College, Israel.
- 2013 - Outstanding Lecturer - Ariel University, ARIEL, Israel.
- 2012 - Outstanding Lecturer - Ariel University, ARIEL, Israel.
- 2010 - Leading Educator of "Gan Raveh" Regional Council, Israel.
- 2007 - Educational Excellence Leader. "Gan Raveh" Regional Council, Israel.

6. List of publications

6.1. Papers and abstracts

- 2020 - Python 3.9 Exercise & Practice Booklet and Presentations.
- 2019 - MATLAB Programming Booklet, Exercise & Practice Booklet and Presentations.
- 2018 - Information Security and Cyber Protection Presentation and Booklet
- 2017 - ANSI C/C++ Software Programming Language Presentation and Booklet.
- 2017 - ANSI C/C++ Software Programming Language Keywords Booklet.
- 2016 - Python 3.6 Software Programming Language Booklet.
- 2016 - Opengl 4.1. Software Programming C++ Language Booklet.

- 2015 - Unix/Linux/Operating Systems Presentation and Booklet.
- 2010 - Data Communication & Information System Presentation and Booklet.
- 2009 - Routing network data - Dykstra's Algorithm and ICT, PKI - Security as a basis for organisational Growth- Public Key Infrastructure.
- 2008 - Real-time voice transmission over the Internet - Voice over Internet Protocol. ISDN - Integrated Services Digital Network.
- 2007 - ADSL- regular phone line digital communication line, Network communication via satellite, Communication Network, mobile phone, Cellular Network.
- 2006 - Cell Phone & Cellular Communication & Digital/Analogue modems, E-commerce EDI - Electronic Data Interchange, Memory management and virtual memory management - Virtual Memory Manager.
- 2005 - Managing memory pages / was in the way management addresses – Memory Paging Memory Addressing & open systems model - OSI. The Architecture of Operating Systems - NT architecture and subsystems. Electronic information exchange network - EDI - Electronic Data Interchange.
- 2004 - Computer Science and information technology teaching approaches, training workshop and didactic teaching.
- 2003 - Introduction to Internet & Web - Internet Websites, programming, Wireless century – the 21st Century Wireless Communication.

7. Academic Roles

- Since 2018, First and second year students' Academic Advisors, departmental seminar coordinator, Academic Teaching Committee Member, Final Projects Committee Member, Computers Courses Coordinator and Mentor of students finishing projects. Mechanical Engineering Department B.Sc. SCE - Shmoon College of Engineering, Israel.
- 2007-2008 Director of Computing Systems Consolidation Project, Teachers Technology College & Kibbutzim College, Israel.
- 1993-2000 Head of the Computers Department, Teachers' staff. Computer Science Department Coordinator. Head of Management staff, Head of Computers, Teachers staff, Security Officer, Member of Discipline, Perches, Communication, and Human Resources Committees, College of Management Technology Centre, Israel.
- 1989-1993 Management staff senior member, Security Officer, Member of Discipline, Purchases, Computer Science Department Coordinator, College of Management Technology Centre, Israel.

8. Preparation of academic programs

- 2000-2005 Building community involvement projects, educational initiatives, courses and workshops for all ages. College of Management & Teachers Technology College, Israel.
- 2003-2005 Enterprise consulting planning program for the new organisational structure of the service centre for students and staff. College of Management & Teachers Technology College, Israel.
- 2000-2003 Care Project Management gifted children, "Fitness and opportunity", and tracking and documenting student achievement in the project.
- 2000-2003 Memory upgrade, computer networking, library corner, and a wall falling Council

- Elementary School in spirit.
- 2000-2001 Definition of role plan and relationship with the bodies of the College of Technology, student service centre manager and staff.

9. Courses taught

- Since 2008, Departments of Electrical and Electronics Engineering, Software Engineering and Mechanical Engineering, B.Sc. program: C /C++ Software Programming, MATLAB, Python, Engineering students' final project guidance, Design & Development of Mechatronics Systems, Autonomous Robotic Systems, at SCE - Shamoon College of Engineering, Israel.
- 2010-2021 Department of Practical Software Engineering program: C Software Programming, Information Security and Cyber Protection, Opendgl Graphics Software programming at ORT REHOVOT College, Israel.
- 2008-2018 Departments of Electrical and Electronics Engineering, Software Engineering, Mechanical Engineering B.Sc. program: C Software Programming, MATLAB Software Programming, Opendgl Graphics Software, UNIX Operating Systems and an Engineering finishing project at SCE - Shamoon College of Engineering, Israel.
- 2008-2018 Department of Practical Software Engineering program: C Software Programming, UNIX OS, Opendgl Graphic Software Programming, Python, Information Security and Cyber Protection at the Design and Technology Centre at Ariel University. Israel.
- 2007-2008 Coordinator of the transfer of information systems and computer databases of the “Teachers College of Technology” and their unification with the databases of the “Kibbutzim College of Education, Technology and Arts, as part of a union between the two colleges.
- 2001-2007 B.A. & B.Ed. Programs: COBOL, Pascal Software Programming, ICT - information and communications technologies, Operating Systems and Systems Analysis, Information Systems, Pedagogical supervision, Didactic workshop, Building Online Courses, Building distance learning courses at the College of Business Management and the Teachers College of Technology, Israel.
- 1990-1992 PASCAL Software Programming, Data Communication at ORT HABONIM Bat-Yam, Israel.
- 1989-2001 B.A. and B.Ed. Programs: Computer Programming, Data Communication and OS Information Systems, and Systems Analysis at the College of Business Management and Teachers College of Technology, Israel.

10. Additional roles

- Since 2024, “Gan Raveh” Regional Council Educational Committee, Educational advisor. Israel.
- 2019-2024 “Gan Raveh” Regional Council Representative in the “Brenner Comprehensive High School” Executive Committee of the Kibbutz Givat Brenner, Israel.
- 2018-2019 Initiates the triple contract between the three “Brenner” Regional Councils, “Gderot” and “Gan Raveh” Economic Partnership and the establishment of a comprehensive “Brenner High School Executive Committee”, Israel.
- 2018-2024 “Gan Raveh” Regional Council Educational Committee Chairman. Israel.
- 2018-2024 “Gan Raveh” Regional Council Scholarships Allowances Committee Member. Israel.

- 2009-2024 "Gan Raveh" Regional Council Culture & Sports Committee Chairman, Israel.
- 2006-2024 "Kefar Hanagid" public representative in "Gan Raveh" Regional Council Plenum. "Gan Raveh" Regional Council, Israel.
- 2008-2024 Public representative on the Steering Committee of "Beteva", a special education school.
- 2007-2024 Initiator of the multi-year educational project "Education 2020" for leading ICT projects in education. "Gan Raveh" Regional Council, Israel.
- 2011-2012 National Education prize committee member, "Gan Raveh" Regional Council, Israel.
- 2009-2010 Provincial Education prize committee member, "Gan Raveh" Regional Council, Israel.
- 2006-2007 The active centre support for the children finds it difficult to "Educational spices" in "AYANOT" youth village, Israel.
- 2006-2009 "Brenner High School", Kibbutz Givat Brenner, Member of the institutional leadership PTA, Israel.
- 2007-2000 "Ofek Hadash" (ICT, education) Project Steering Committee Chairman. "Gan Raveh" Regional Elementary School, Israel.
- 2001-2007 "Gan Raveh" Regional Council Education Committee Member, HR tenders committee, Appeals Committee, Israel.
- 1994-2002 "Gan Raveh" Elementary School PTA Deputy Chairman. "Gan Raveh" Regional Elementary School, Israel.
- 1999-2001 Education Committee Chairman. "Gan Raveh" Regional Council, Israel.
- 1994-1998 "Kefar Hanagid" Board of Directors Chairman. Kefar Hanagid, Israel.
- 1988-1998 "Kefar Hanagid" Board of Directors Member, Educational, Couture & Sports committee Chairman. Kefar Hanagid, Israel.