

HIT – HOLON INSTITUTE OF TECHNOLOGY

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Faculty	<u>Sciences</u>	Department <u>School of Computer Science</u>
Home Address	<u>8/8 Grinbaum St., Rishon Le-Zion</u>	Phone No. <u>054-2894016</u>
	(date) (country)	(home) (work) (mobile)
Date/place of birth	<u>7/7/1963 Russia</u>	Date of arrival in Israel <u>12/1991</u>
ZAHAL, (Israeli) Military Service	<u>N/A</u>	- <u>N/A</u>
	dates (enlisted)	(discharged)
Marital Status	<u>Married</u>	No. of children <u>two</u>

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[Andrei Kojukhov | LinkedIn](#)

A. EDUCATION

Period of Study (dates)	Name of University (including city and country if not in Israel)	Subject	Degree or Professional License	Date of Award
1980-1983	Moscow Technological University, Moscow, Russia	Computer Systems	B.Sc.	June 1983
1984-1986	Moscow Technological University, Moscow, Russia	Computer Systems	M.Sc.	June 1986
1988-1991	Moscow Technological University, Moscow, Russia	Computer Systems	Ph.D. ①	Not awarded
2010-2017	Tel-Aviv University	Technology and Education	Ph.D. ②	February 2017

Title of Master's Thesis: Data processing in devices for highly reliable system of unified external storage

Name of Supervisors: Prof. S. Peskova

Title of Doctoral Dissertation: Methods and apparatus for error correction in magnetic and bubble memory

Names of Supervisors: Prof. S. Peskova

Title of Doctoral Dissertation: Virtualized, personalized and ubiquitous learning in post-industrial society

Names of Supervisors: Prof. I. Levin

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- ① Moscow Technological University, Moscow, Russia
 - ② Tel-Aviv University

A. Academic Profile

Dr. Andrei Kojukhov is a Senior Lecturer at the School of Computer Science, Holon Institute of Technology (HIT).

His research focuses on:

- Generative AI
- Human-AI Collaboration
- Meta-AI Skills and AI Literacy
- Agentic AI and Multi-Agent Systems
- Explainable AI (XAI)
- AI-Augmented Cybersecurity
- AI Governance and Decision Sovereignty
- Autonomous Telecom and Network Systems

Dr. Kojukhov combines more than 30 years of industrial experience in telecommunications, cloud-native systems, AI-driven orchestration, and international standards development with academic research in AI-enhanced education and governable AI systems.

B. FURTHER STUDIES

Period of Study (dates)	Name of University (including city and country if not in Israel)	Subject	Degree or Professional License	Date of Award
No Further Studies				

C. ACADEMIC AND PROFESSIONAL EXPERIENCE**Academic:**

Period (dates)	Name of Institution (city, country)	Department	Rank/Function
1983-1985	Moscow Technical University (MTU), Moscow, Russia	Computer Science	Software Engineer
1986-1991	Moscow Technical University (MTU), Moscow, Russia	Computer Science	Researcher; PhD student
2010-2018	Tel-Aviv University, Tel-Aviv, Israel	School of Education	Researcher: New technology trends, models and tools for personalized ubiquitous education; PhD student
2017-2018	Tel-Aviv University	Global Lab (Great Britain)	Chief Technology Officer (part-time) Research and architecture definition on personalized ubiquitous travel services based on Global Lab platform
10/1/2025-Present	HIT – Holon Institute of Technology, Holon, Israel	Computer Science	Equivalent to Senior Lecturer Teaching mandatory courses: <ul style="list-style-type: none"> • Introduction to Data Science • Introduction to Machine Learning • Data Structures • Software Engineering Developing curriculum for the course "Introduction to AI-Driven Cybersecurity" Research in Implications of Generative AI for Education

Professional:

Period (dates)	Name of Institution (city, country)	Department	Rank/Function
1992-1993	Scitex, Israel	Applications for Scanners	Software Engineer
1993-1996	ECI Telecom, Israel	Access Networks	Senior Software Engineer

1996-1998	ECI Telecom, Israel	Access Networks	Software Team Leader
1998-2001	ECI Telecom, Israel	Access Networks	Software Director
2001-2003	Globespan, international	Network Processors	Project Manager
2003-2005	Texas Instruments, Israel	WLAN Products and standards R&D Security and QoS	System Architect
2005-2010	Comverse Network Systems, Israel	Chief Technology Office, Mobile networks standards R&D:4G/LTE, IMS, Security	System Architect and Standards Manager

C. ACADEMIC AND PROFESSIONAL EXPERIENCE, contd.

Professional:

Period (dates)	Name of Institution (city, country)	Department	Rank/Function
2010-2014	AT&T Labs, Israel	IP Multi-media products R&D	System Architect <ul style="list-style-type: none"> • Converged fixed-mobile networks • Unified IP Communications
2015-2023	Amdocs, Israel	Open Networks (then Intelligent Networks) BU R&D	Senior System Architect <ul style="list-style-type: none"> • Telco Cloud management • 5G/6G Mobile networks • AI based Open RAN • Open network Cyber-security with Zero Trust
2023-2025	RAD Data Communication, Israel	R&D, IoT Network	System Architect Management projects: <ul style="list-style-type: none"> • Consumers IoT management, • Security, AI based optimization
January 2025 – Present	Holon Institute of Technology (HIT)	School of Computer Science	Senior Lecturer Teaching <ul style="list-style-type: none"> • Introduction to Data Science • Machine Learning • Data Structures • Networks and Cybersecurity • Software Engineering • Cybersecurity Enhanced by AI Curriculum Development: <ul style="list-style-type: none"> • AI-Augmented Cybersecurity • Agentic AI in Cybersecurity • Human-AI Collaboration Research: <ul style="list-style-type: none"> • Generative AI in Education • Meta-AI Skills • Human-AI Collaboration • AI-Augmented Cybersecurity • Explainable AI (XAI) • Agentic AI Systems

D. PROFESSIONAL AND PUBLIC ACTIVITIES

Period (dates)	Name of Institution/Conference/ Journal/Exhibitions/Projects (city, country)	Occasion
1990-1991	Moscow High School, No.114, Moscow, Russia	Visiting Lecturer on Computer Science
2012 - 2015	European Telecommunications Standards Institute - ETSI Next Generation Networking	Vice-Chair of Working Group
2015 - 2017	3GPP	Rapporteur of Working Group
2020 - 2022	ETSI NFV	Rapporteur of Working Group

D1. INVOLVEMENT IN HIT INSTITUTIONAL ACTIVITIES

Period (dates)	Occasion
2025 - 2026	New Education Program Development To introduce the AI and GenAI in Computer Science BSc

E. ACADEMIC AND PROFESSIONAL AWARDS

Year	Name of Institution (city, country)	Occasion
2005	Texas Instruments, Israel	Innovation and standardization award
2020; 2023	Amdocs, Israel	Innovation and patents award

E1. RESEARCH GRANTS

Year	Name of Institution (city, country)	Occasion/Amount
None so far		

F. MEMBERSHIP IN PROFESSIONAL SOCIETIES

Year	Society (country)
1996-2000	Digital Subscriber Loop (DSL) Forum
1998-2001	Asynchronous Transfer Mode (ATM) Forum
2003-2005	IEEE – 802.11 (Wireless LAN)
2003-2005	Wi-Fi Forum

2005-2023	European Telecommunications Standards Institute – ETSI, ETSI Network Function Virtualization (NFV) group
2005-2023	3rd Generation Partner Project (3GPP) – Mobile 4G/5G
2010-2025	Telecom Management Forum (TMF)
2020-2023	Open Radio Access Network (O-RAN)
2023-2025	Low-power Radio access (LoRa) WAN

G. STUDENTS SUPERVISED BY CANDIDATE

HIT – Holon Institute of Technology does not currently have an accreditation for granting Dissertation (Ph.D.) degrees

G1. DOCTORAL STUDENTS

Year	Name of Student	Title of Thesis	Name of Academic Institution
None			

G2. M.A./M.Sc. STUDENTS (please indicate if degree is with "thesis" or "final project")

Year	Name of Student	Title of Thesis/Final Project	Name of Academic Institution
2026	Sapir Shenhav	Multi-agent Meta-AI orchestration	HIT

Courses Taught at Academic Institutions and Industry

Year	Name of Course	Institution
1983-1991	<ul style="list-style-type: none"> ▪ Computer Science 	Moscow Technical University
2003-2005	Lectures and workshops for TI customers in the field of Wi-Fi	Texas Instruments
2005-2010	Lectures and workshops for strategic customers and marketing/sales co-workers promoting IP-based Multimedia and 4G/LTE	Comverse Israel
2010-2012	Lecturer and students' projects supervisor on: <ul style="list-style-type: none"> ▪ Information Networking and Security ▪ Lecturer and students' projects supervisor on JAVA language basics, JAVA Servers and JAVA networking 	Ono Academic College
2010-2014	Lectures and workshops on IP multimedia services	AT&T Labs
2015-2023	Lectures and workshops for strategic customers and marketing/sales co-workers promoting: <ul style="list-style-type: none"> ▪ NFV Cloud management ▪ Cloud resources modeling ▪ 5G Network Management and Slicing ▪ 5G ORAN Optimization and AI models 	Amdocs
2015-2018	Conducted lectures and research projects on teacher learning in personalized ubiquitous environments based on IFTTT-orchestrated Google and FB social networks	School of Education, Tel-Aviv University
January 2025 -	Teaching mandatory courses: <ul style="list-style-type: none"> • Introduction to Data Science • Introduction to Machine Learning • Data Structures • Software Engineering Developing curriculum for the course "Introduction to AI-Driven Cybersecurity"	HIT Computer Science

Research Interests

- Generative AI
- Human-AI Collaboration
- Meta-AI Skills
- AI Literacy
- Explainable AI
- Agentic AI
- Multi-Agent Systems
- Governable Autonomy
- AI Governance
- Decision Sovereignty
- AI-Augmented Cybersecurity
- Security Operations Centers
- Autonomous Networks

Current Research Projects

SOC Lite

AI-Augmented Security Operations Center
for cybersecurity education

- AI-native SOC architecture
- Human-AI collaboration
- Explainable cybersecurity
- Multi-agent orchestration

Meta-AI Skills

Development of frameworks for Human-AI
cognitive collaboration and AI literacy.

Agentic Cybersecurity

Multi-agent architectures for explainable,
governable cybersecurity decision-making.

Decision Sovereignty

Governance-aware authority allocation
for agentic AI systems.

Selected Standards Contributions

- ETSI NFV SOL004 Rapporteur
- ETSI NFV IFA011 Rapporteur
- 3GPP SA1 Contributions
- IEEE 802.11e Contributions
- ONAP Contributions

PUBLICATIONS

Research Impact

Google Scholar Citations: 148+

h-index: 6

i10-index: 5

Granted Patents: 9+

International Standards Contributions:
ETSI, 3GPP, O-RAN, ONAP, IEEE

C. REFEREED ARTICLES (ranked by either WoS or SCImago) (published)

1. **A. Kojukhov**, I. Levin, A. Bovshover (2025)
From Subsumption to Semantic Mediation: A Generative Orchestration Architecture for Autonomous Systems. Algorithms MDPI
2. A. Bovshover, **A. Kojukhov**, I. Levin (2026) Probabilistic Orchestrator for Indeterministic Multi-Agent Systems in Real-Time Environments. Algorithms MDPI
3. I. Levin, M. Marom, **A. Kojukhov** (2025)
Rethinking AI in education: Highlighting the meta-cognitive challenge
BRAIN. Broad Research in Artificial Intelligence and Neuroscience. 16(1 Sup1), (250-263)
published 6 April 2025 <https://doi.org/10.70594/brain/16.S1/21>
WoS: Q4, IF: 0.5 (2024), JCR citation: 1
4. A. Kojukhov, S.A. Peskova (1989)
Models for evaluation of reliability in external memory with error correction codes
Moscow Technical University (35 pages) [in Russian]
5. A. Kojukhov (1989)
Method for evaluation of mean time between errors for memory with error correction codes
Moscow Technical University (15 pages) [in Russian]]
6. A. Kojukhov, I. Andreeva (1989)
Adapted control system for bubble memory devices on the basis of Intel 8080
Publications of universities, No.195
Moscow: Moscow Technical University, 1989, (116-120) [in Russian]

D. CHAPTERS IN BOOKS

1. I. Levin, **A. Kojukhov** (2013)
Personalization of learning environments in a postindustrial class
in: M. Pătruț, B. Pătruț (eds.), *Social Media in Higher Education: Teaching in Web 2.0*
IGI Global, USA, 2013 (105-123)
DOI: 78-1-4666-2971-4

E. PAPERS PRESENTED AT SCIENTIFIC MEETINGS PUBLISHED IN PROCEEDINGS**Peer reviewed:**

1. **A. Kojukhov**, M. Maron, I. Levin (2025)
Beyond tools: Developing meta-AI skills for cognitive collaboration in education
17th Int'l. Conf. on Education and New Learning Technologies (EDULearn25 Proc.)
Palma, Spain, 30 June-2nd July 2025 (3732-3738)
2. **A. Kojukhov**, I. Levin (2015)
Teacher's awareness regarding "Networked Learner"
SMART 2014 Int'l. Conf. - Social Media in Academia: Research and Teaching
B. Patrut, D. Andone, C. Holotescu, G. Grosseck (eds.)
Timisoara, Romania, 18-21 September 2014 (191-202)
JCR citation: 1

E. PAPERS PRESENTED AT SCIENTIFIC MEETINGS PUBLISHED IN PROCEEDINGS, contd.**Peer reviewed:**

3. **A. Kojukhov**, I. Levin (2014)
Studying social micro-worlds as personal learning environments
Proc. European Conf. on Social Media (ECSM2014)
Brighton, UK, 10-11 July 2014
[Google scholar citation:1]
4. **A. Kojukhov**, I. Levin (2010)
Virtualized, personalized and ubiquitous learning in post-industrial society
8th European Conf. on Computing and Philosophy (ECAP-2010)
München, Germany, 4-6 October 2010
5. **A. Kojukhov**, I. Levin (2010)
Ubiquitous personalized learning environment in post-industrial society
Int'l. Conf. on Information Society
London, UK, 28-30 June 2010 (303-306)
[Google scholar citations: 5]
6. I. Levin, **A. Kojukhov** (2009)
Personalizing education in post-industrial society
The Third Int'l. Conf. on Digital Society (ICDS '09)
Cancun, Mexico, 1-7 February 2009 (20-23)
JCR citations: 2
Scopus citations: 6
[Google scholar citations: 8]
7. I. Levin, **A. Kojukhov** (2008)
Virtualization and educational technology in post-industrial society
Int'l. Design & Technology Education Conf. (PATT-20)
Tel-Aviv, Israel, 3-6 November 2008
[Google scholar citations: 2]
8. **A. Kojukhov**, S. Peskova (1991)
Prediction of reliability estimate from results of stress tests
Trans. on Reports of All-Union Conf. Elements and Devices on Bubble Memory
Moscow, Russia [in Russian]

9. **A. Kojukhov**, I. Andreeva (1989)
Models for evaluation of reliability function for memory devices with error correcting codes
Publications of Scientific and Engineering Information Institute
Moscow, Russia, No.6196-B89 [in Russian]
10. **A. Kojukhov**, I. Andreeva (1989)
Average time between failures evaluation for memory devices with error correction codes
Publications of Scientific and Engineering Information Institute
Moscow, Russia, No.1415-B90 [in Russian]
11. **A. Kojukhov**, I. Andreeva (1989)
Functional validity of embedded bubble memory
Trans. on Reports of All-Union Conf. Fault Modeling and Simulation of Chips
Moscow, Russia (177-178) [in Russian]

E. PAPERS PRESENTED AT SCIENTIFIC MEETINGS PUBLISHED IN PROCEEDINGS, contd.**Peer reviewed:**

12. **A. Kojukhov**, S. Peskova (1988)
Analytical models for evaluation of memory reliability function for PC memory
Trans. on Reports of All-Union Conf. Development and Production of Personal Computers
Minsk, Belarus (15-17) [in Russian]
13. **A. Kojukhov**, S.A. Peskova(1988)
New decoding algorithm for modified fire code
Trans. on Reports of All-Union Conf. Development of Memory Chips
Moscow, Russia (p.161) [in Russian]
14. **A. Kojukhov**, S. Peskova (1987)
Methods and apparatus for error correction in magnetic memory
Trans. on Reports of All-Union Conf. Elements and Devices on Bubble Memory
Moscow, Russia (p.132) [in Russian]

H. OTHER PUBLICATIONS**H1. PATENTS**

1. I. Andreeva, **A. Kojukhov** (1988)
Error detecting device
SU No 1485245. Int'l. Classification Code (ICC) G06F11/00, H03M13/00
2. I. Andreeva, **A. Kojukhov**, S. Peskova (1988)
Error detecting and correcting device
SU No.1559414. ICC G06F11/00, H03M13/00
3. I. Andreeva, **A. Kojukhov**, V. Toporkov (1989)
Bubble memory controller
SU No.1549414. ICC G11C11/00
4. I. Andreeva, **A. Kojukhov** (1989)
Error detecting device in data blocs transmission
SU No 1621746. ICC G06F11/00, H03M13/00
5. **A. Kojukhov**, A. Goldner, T. Naveh, A. Chapnick, B. Glozman (2024)
System, method, and computer program for resource orchestration in a 5G network
based on user equipment behavior analytics
Patent No.: US 11,963,200 B2, Date of Patent: 16 April 2024
6. **A. Kojukhov**, A. Chapnick, B. Glozman, R. Segal (2024)
System, method, and computer program for a model driven non-real time radio intelligent controller
(RIC) for O-RAN management and orchestration
Patent No.: US 11,888,685 B1, Date of Patent: 30 January 2024
7. L. Barak, B. Glozman, **A. Kojukhov**, A. Goldner, A. Chapnick, G. Podolsky, R. Segal (2023)
System, method, and computer program for generating a network slice experience index for
evaluating a network slice
Patent No.: US 11,637,760 B1, Date of Patent: 25 April 2023
8. **A. Kojukhov**, A. Goldner, T. Naveh, A. Chapnick, B. Glozman (2022)
System, method, and computer program for user equipment handling in a 5G network
based on available resources
Patent No.: US 11,477,827 B2, Date of patent: 18 October 2022

H. OTHER PUBLICATIONS, contd.**H1. PATENTS**

9. B. Glozman, A. Goldner, **A. Kojukhov**, A. Chapnick (2021)
System, method, and computer program for network slice charging management
Patent No.: US 10,972,881 B1, Date of Patent: 6 April 2021
10. **A. Kojukhov**, A. Goldner, R.A. Schwartz, E. Felstaine, L.K. Wein, O. Hermoni (2020)
System, method, and computer program for automatically certifying a virtual network function (VNF) for use in a network function virtualization (NFV) based communication network
Patent No.: US 10,700,946 B2, Date of Patent: 30 June 2020
[Google scholar citations: 12]
11. R.A. Schwartz, E. Felstaine, L.K. Wein, **A. Kojukhov**, O. Hermoni (2018)
System, method, and computer program for automatically certifying a virtual network function (VNF) for use in a network function virtualization (NFV) based communication network
Patent No.: US 10,069,694 B1, Date of Patent: 4 September 2018
[Google scholar citations: 15]

H2. PATENT APPLICATION PUBLICATIONS

1. **A. Kojukhov**, A. Chapnick, B. Glozman, G. Podolsky, A. Gal (2024)
System, method, and computer program for a TOSCA modeling optimization for 5G network orchestration
Publication No.: US 2024/0323101 A1, Publication date: 26 September 2024
2. O. Hermoni, A. Goldner, N. Sandlerman, **A. Kojukhov**, L.K. Win, E. Felstaine (2018)
System, method, and computer program for calculating a cost-of-ownership for virtual network functions (VNFs) in a network function virtualization (NFV) based communication network
Publication No.: US 2018/0204234 A1, Publication Date: 19 July 2018
[Google scholar citations: 12]

H3. PUBLICATIONS IN STANDARDS ORGANIZATIONS AND OTHERS

1. T. Halfon, **A. Kojukhov** (2017)
Linux Foundation Open Network Access Projects (ONAP)
VNF Package CSAR Format 3 August 2017
Orchestration and Controller Alignment for ONAP Release
2. **A. Kojukhov**, A.M. de Nicolas, B. Chatras, D. Druta, D. Gassanov, M. Brunner, M. Brenner, S. Li, T. Nguephu, U. Rauschenbach, Z. Sacks (2017)
Network Functions Virtualisation (NFV) release 2; protocols and data models; VNF package specification. GS NFV-SOL 004 V2., 3.1
VNF Package Stage 3 spec - Rapporteur presentation
Group specification, ETSI, published July 2017
[Google scholar citations: 6]
3. **A. Kojukhov** (2006)
3GPP SA1 S1-060379;"S1-060379.zip"; "CAT WI Revision"; "Comverse Network Systems"
27 March 2006
4. **A. Kojukhov** et al. (2005)
802.11e-2005, IEEE Standard for Information Technology
Local and Metropolitan Area Networks
Specific requirements, Part 11: Wireless LAN Medium

H. OTHER PUBLICATIONS, contd.

H3. PUBLICATIONS IN STANDARDS ORGANIZATIONS AND OTHERS

5. **A. Kojukhov** et al. (2004)
IEEE P802.11 Wireless LANs: 802.11e WLAN QoS
November 2004 doc.: IEEE802.11-04/1437-00
6. **A. Kojukhov** (1989)
Remote control system on the basis of Intel 8086
Non-disclosed publication
7. **A. Kojukhov** et al. (2007)
IEEE Standard for Information technology: Telecommunications and information exchange
between systems
Local and Metropolitan Area Networks
Specific requirements Part 11: Wireless LAN Medium Access Control (MAC) and
Physical Layer (PHY) Specifications
8. **A. Kojukhov** (2018)
ETSI NFV-IFA - GS NFV-IFA 011
V3.1.1. Rapporteur presentation
9. **A. Kojukhov**, G. Wisman (2018)
Innovative blockchain technology for VNF license usage management
Amdocs Publications
[amdocs-vnf-license-manager-solution-overview.pdf](#)