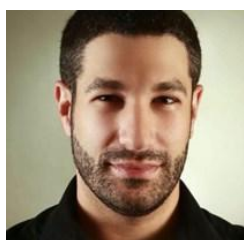




Supported by Artificial Intelligence, Data-Driven Innovation and Technology Management (ADTM-2026)

Monday, June 15th, 2026

Invited Lecturers



Prof. Elishai Ezra Tsur is an Associate Professor at the Department of Mathematics and Computer Science at the Open University of Israel, where he serves as the Dean of Academic Studies and the Head of the M.Sc. program in Machine Learning and Big Data. He is the Founding Director of the Neuro-Biomorphic Engineering Lab (NBEL). Prof. Ezra Tsur holds a Ph.D. in Bioengineering from the Hebrew University of Jerusalem (2016) and completed post-doctoral studies in Computational Neuroscience at the Weizmann Institute of Science (2017–2019). His diverse academic background also includes degrees in Computer Science, Life Sciences, and Clinical Neuropsychology.

Prof. Ezra Tsur has published numerous peer-reviewed papers and is the author of a comprehensive textbook on Neuromorphic Engineering (CRC Press). His pioneering research at the intersection of biology and engineering has earned him recognition as an INK Fellow and a graduate of Singularity University at NASA Ames Research Center. He currently serves on the Academic Editorial Board of PLoS Computational Biology and has guest-edited several collections for Frontiers in Neurorobotics. His lab's innovation in neurorobotics was recently recognized with an honorable mention in Fast Company's World Changing Ideas.



Prof. Ahmad Salman is a Full Professor at the Physics Department of Shamoon College of Engineering (SCE). He joined the college in October 2007 as a lecturer within the physics unit, following his selection as a recipient of the prestigious MAOF Fellowship (2008–2010). Prof. Salman earned his B.Sc., M.Sc., and Ph.D. in Physics from Ben-Gurion University of the Negev, where he specialized in the field of infrared spectroscopy.

Throughout his tenure at SCE, Prof. Salman has been recognized four times as a leading researcher and has secured significant research funding, including major external grants from the Israel Science Foundation (ISF) and the KAMIN program (Ministry of Economy). He is a highly active contributor to the scientific community, serving as a referee for numerous internationally recognized academic journals, including *Nature Communications*, *Analyst*, and *Analytical Chemistry*.

Program

09:30–10:00	Registration + Refreshments: Minkoff Entrance			
10:00–10:20	Welcome Remarks: Minkoff Auditorium Prof. Jehuda Haddad, SCE Founder and Rector Prof. Shlomo Greenberg, ADTM 2026 Chair			
10:20–11:10	Keynote lecture: Prof. Elishai Ezra Tsur, Department of Mathematics and Computer Science, The Open University of Israel <i>Building Minds, Not Models: What Can You Do with an Artificial Brain?</i> (Minkoff Auditorium)			
11:10–11:30	Coffee Break: Legacy Build. (50) Entrance			
11:30–12:50	Parallel track A1: Legacy (50) Room 102 <i>Competition Strategy</i> Chair: Prof. Yizhaq Minchuk (SCE)	Parallel track B1: Legacy (50) Room 106 <i>Data App. in Economics & Finance</i> Chair: Dr. Elroy Hadad (SCE)	Parallel track C1: Legacy (50) Room 109 <i>Cyber Security</i> Chair: Dr. Aviad Elyashar (SCE)	Parallel track D1: Legacy (50) Room 110 <i>ML-based applications</i> Chair: Prof. Shlomo Greenberg (SCE)
12:50–14:10	Lunch + Poster Session			
14:10–14:50	Keynote lecture: Prof. Ahmad Salman, Department of Physics, SCE <i>AI-Driven Infrared Spectroscopy for Rapid Infection Etiology Diagnosis</i> (Minkoff Auditorium)			
15:00–16:20	Parallel track A2: Legacy (50) Room 102 <i>NLP and Applications</i> Chair: Dr. Natalia Venetik (SCE)	Parallel track B2: Legacy (50) Room 106 <i>ML-based Signal Processing</i> Chair: Dr. Yehuda Ben-Shimol (BGU)	Parallel track C2: Legacy (50) Room 109 <i>Social Computational Intelligence</i> Chair: Dr. Marina Knyazhanky (SCE)	Parallel track D2: Legacy (50) Room TBD <i>AI-based Spectral Imaging</i> Chair: Dr. Ziv Brand (SCE)
16:20–16:30	Closing Remarks: Legacy (50) Entrance			

Parallel Track A1: Legacy Build. (50) Room 102

	Competition Strategy Session Chair: Prof. Yizhaq Minchuk (SCE)	
11:30	Doron Klunover (SCE)	The Bankruptcy Problem: A Contest Approach
11:50	Yizhaq Minchuk (SCE)	Attacker Sophistication and Cybersecurity Investment: A Multi-Defender Contest Model
12:10	Dvir Ross (SCE)	Modeling Basketball Shooting Patterns Using Markov Chains: A Longitudinal Analysis of the Hot Hand Phenomenon
12:30	Dvir Ross (SCE) Nehoray Sade (SCE) Aviv Asraf (SCE)	Data-Driven Risk-Adjusted Performance Analysis: A Structural Complement to Classical Risk-Adjusted Ratios

Parallel Track B1: Legacy Build. (50) Room 106

	Data App. in Economics and Finance Chair: Dr. Elroy Hadad (SCE)	
11:30	Baruch Keren (SCE)	Computational Theory & Optimization A Two-Stage Heuristic for Minimizing Machines and Operators in Cyclic Production Scheduling
11:50	Dima Alberg (SCE), Elroi Hadad (SCE)	Tracking the Unseen: AI-Driven Dashboards for Real-Time Detection of Calendar Anomalies in Cryptocurrency Markets
12:10	Arik Sadeh (HIT), Eyal Brill (HIT)	Price Settings in Bertrand Duopoly with Interaction, Empirical and Theoretical Results.
12:30	Adi Katz (SCE), Yael Brender-Ilan (Ariel University)	The Serious Business of Humor: Insights into Digital Managerial Communication

Parallel Session C1: Legacy Build. (50) Room 109

	Cyber Security Chair: Dr. Aviad Elyashar (SCE)	
11:30	Jonathan Cohen (BGU), Xin Li (BGU), Chenhan Xiao (ASU), Aviad Elyashar (SCE), Yang Weng (ASU), Rami Puzis (BGU)	Stealthy False Data Injection Attack Detection in Power Systems
11:50	Javier Roasso (BGU), Jaidip Kotak (BGU), Aviad Elyashar (SCE), Robert Moskovitch (BGU), Asaf Shabtai (BGU), Rami Puzis (BGU)	Enumeration COPE - Common Operational Processes
12:10	Lavi Ben-Shimol (BGU)	Cybersecurity & AI in Security Applications LLMCloudHunter: Harnessing LLMs for Automated Extraction of Detection Rules from Cloud-Based CTI
12:50	Ilya Feigin (Embedded Solutions 3000)	Invisible Firewalls: The Next Evolution in Network Defense

Parallel Session D1: Legacy Build. (50) Room 110

	ML-based applications Chair: Prof. Shlomo Greenberg (SCE)	
11:30	Avi Hazan (BGU), Elishai Ezra Tsur (BGU), Shlomo Greenberg (SCE)	4SM: Selective Spiking State Space Models for Neuromorphic Sequence Learning
11:50	Erez Manor (SCE), Shlomo Greenberg (SCE)	The Rise of TinyML: Bringing Intelligent Autonomy and Next-Gen Innovations to Extreme Edge Devices
12:10	Tom Trigano (SCE)	Machine Learning for Activity Estimation in Spectroscopy Signals
12:50	Moshe Bensimon (BGU), Shlomo Greenberg (SCE)	Computing Like the Brain: An Introduction to Neuromorphic Systems and Their Applications

Parallel Session A2: Legacy Build. (50) Room 102

	NLP and Applications Chair: Dr. Natalia Vanetik (SCE)	
15:00	Bozidar Ivankovic Zdenko Bolfek University of Applied Sciences Hrvatsko zagorje Krapina, Croatia)	Artificial Intelligence, Automation and Structural Labour Shortages in the Croatian Labour Market
15:20	Natalia Vanetik (SCE)	Analyzing Rhetorical Evolution in Political Campaign Discourse
15:40	Idan-Chaim Cohen (BGU), Noya Littor (BGU), Aviad Elyashar (SCE), Rami Puzis (BGU), Odeya Cohen (BGU)	Machine Psychology in Safety-Critical Systems: The Case of Large Language Models in Disaster Management
16:00	Karin Shistik (BGU), Idan-Chaim Cohen (BGU), Aviad Elyashar (SCE), Ortal Slobodin (BGU), Odeya Cohen (BGU), Rami Puzis (BGU)	State vs. Trait Anxiety in Causal Language Models

Parallel Session B2: Legacy Build. (50) Room 106

	ML-based applications Chair: Dr. Yehuda Ben-Shimol	
15:00	Aviva Peeters (SCE) Yafit Cohen, Eitan Goldshtein, Alon Ben-Gal.	A Spatial Machine Learning Tool for Optimizing Sampling Distribution.
15:20	Guy Tel Zur (BGU)	Digital Twins as an additional security protection layer in industrial control systems (ICS)
15:40	Avishai Weizman (BGU), Yehuda Ben-Shimol (BGU), Itshak Lapidot (Afeka)	Spoofing-Robust Speaker Verification Based on Time-Domain Embedding
16:00	Yehuda Ben-Shimol (BGU) Alan Frid (BGU) Shlomo Greenberg (SCE)	Drones Detection using Deep Neural Network with RF and Acoustic Features

Parallel Session C2: Legacy Build. (50) Room 109

	Social Computational Intelligence Chair: Dr. Marina Knyazhansky (SCE)	
15:00	Hagai Ilani (SCE), Lior Aronshtam (SCE), Elad Shufan,	Fair Assignment of Plots to Tenants
15:20	Marina Knyazhansky (SCE)	VR Systems for Exposure-Based Treatment of Specific Phobias
15:40	Tammar Shrot (SCE), Hadassa Daltrophe (SCE) Naomi Korem (SCE)	A Permission-Based Approach to Minimizing Echo Chambers on Social Platforms
16:00	Naomi Korem (SCE), Tammar Shrot (SCE), Hadassa Daltrophe (SCE)	What Machines Reveal about the Principle of Proportionality

Parallel Session D2: Legacy Build. (50) Room 110

	AI-based Spectral Imaging Chair: Prof. Issac August (SCE)	
15:00	Edward C. Wellman (University of Arizona, USA)	A Machine Learning Approach to estimating the intact strength of altered granites from Short Wave Infrared
15:20	Dean N. Riley (University of Arizona, USA)	Optical and infrared spectroscopy mineral identification and volume estimates applied to forward modeling of cross-property rock physics models for some New Mexico granites.
15:40	David Martynenko (SCE), Or Adir (SCE), Isaac Y August (SCE)	Computational Spectroscopy Based on Event-Driven Signal Reconstruction Using Spiking Neural Networks
16:00	Or Bastiker (SCE)	Error Modeling in the Sensing Matrix Describing Computational Spectrometers

Poster Session: Minkoff Enterance (12:50 – 14:10)

Keturah Shlomo (SCE), Shilat Haya Yosefi (SCE), Natalia Vanetik (SCE)	Emotion Detection in Hebrew: Dataset Creation and Evaluation
Dolev Dahan (BGU), Shlomo Greenberg (SCE), Erez Manor (BGU)	Hardware Acceleration of Spiking Neural Networks for Real-Time Edge AI
Xin Li (BGU), Chenhan Xiao (ASU), Jonathan Cohen (BGU), Aviad Elyashar (SCE), Yang Weng (USA), Rami Puzis (BGU)	Cycle-Space Informed Detection of Autoencoded Blind False Data Injection Attacks on Power Systems
Lior Abergel (SCE), Maor Merling (SCE), Irina Rabaev (SCE), Marina Litvak (SCE)	Beyond Age Groups: Continuous Age Prediction from Handwriting Using Deep Learning
Doron Pasha (BGU), Majd Abu Aisheh (BGU), Isaac Y. August (SCE), Ibrahim Abdulhalim (BGU)	Conversion of RGB Camera into Hyperspectral Imager using a Liquid Crystal Spectral Modulator and Artificial Intelligence
Maysa Abu Shareb (SCE), Hussien Abo Ismael (SCE), Natalia Vanetik (SCE)	Bridging the Linguistic Gap: A New Dataset for Arabic Text Simplification in Israel
Nashaat Abu Alkean (SCE), Omar Awaisha (SCE), Natalia Vanetik (SCE)	Arabic Speech Emotion Recognition (SER): Dataset Adaptation & Fine-Tuning of wav2vec 2.0
Batel Gadelov (SCE), Shir Abutbul (SCE), Natalia Vanetik (SCE)	Exploring the Boundaries of Automated Hebrew Resume Parsing
Ronel Davidov (BGU), Shlomo Greenberg (SCE)	Event-Based Drone Detection Using Spiking Neural Networks
Noam Cohen Shvartzberg (BGU), Shlomo Greenberg (SCE)	SCTN-Based Neuromorphic Frequency Analyzer for Epileptic Seizure Detection
Avner Finkelstein, Rami Yosef, Elroi Hadad (SCE), Shenhav Malul	Department of Industrial Engineering and Management
Anton Vernytsky (SCE), Dagan Bakun Mazor (SCE), Isaac August (SCE)	Non-Destructive Prediction of Carbonate Rock Engineering Properties Using NIR–SWIR Hyperspectral Imaging and Neural Networks
Alexander Sidorov (SCE), Alona Yael Shalmiev (SCE), Aviad Elyashar (SCE)	Metadata Leakage and Insider Threats in Zoom
Bar Ifergan (SCE), Itay Kisos (SCE), Aviad Elyashar (SCE)	Unmasking Digital Chameleons Longitudinal Analysis of User Identity Shifts and Platform Moderation on X
Dor Israeli (SCE), Or Yona (SCE), Hadas Chassidim (SCE), Nitzan Cohen (Kaye Academic College)	Everyday AI-Based Interactive Social Skills Training for High Functioning Autism
Lidor Tubul (SCE), Shlomo Greenberg (SCE)	HTM-COPE-guided Anomaly Detection and automated COPE extraction on a Multi-Process Water Treatment System