



# The Eighth Symposium on Cyber Security, Cryptology and Machine Learning (CSCML 2024)

## December 19-20, 2024

### Tentative Full Program Schedule

Thursday, December 19, 2024

Time	Main Room/ Academic Research Track	Other Tracks	
<b>8:00-8:10</b> Israel Time GMT +2	<b>Opening Speech:</b> <b>Professor Shlomi Dolev</b>		
<b>8:15-08:55</b> Israel Time GMT+2	<b>Keynote Speaker 1: Andrew C. Yao</b> Dean of the Institute for Interdisciplinary Information Sciences (IIS) at Tsinghua University <b>Talk Titled:</b> <i>Cryptography in the Age of Bio, Quantum and AI</i> Hosted By: Giuseppe Persiano	<b>8:15-8:45</b>	Zoom Meeting to open the competition. <b>CAPTURE THE FLAG</b>
<b>9:00-10:35</b> Israel Time GMT +2	<b>Academic Track: Morning Session</b> Moderator: Michael Eldad	<b>PhD/ Masters Track Session 1:</b> Moderator: Oded Margalit	
	<b>9:00-9:20</b> <b>Polynomial Adaptation of Large-Scale CNNs for Homomorphic Encryption-Based Secure Inference</b> Moran Baruch, Nir Drucker, Gilad Ezov, Eyal Kushnir, Jenny Lerner, Yoav Goldberg, Omri Soceanu and Itamar	<b>9:05-9:10</b>	Welcome and Instructions
	<b>9:20-9:40</b> <b>Password-authenticated Cryptography from Consumable Tokens</b> Ghada Almashaqbeh	<b>9:10-9:20</b>	
	<b>9:40-10:00</b> <b>Robust Secure Aggregation for Co-located IoT Devices with Corruption Localization</b> Giovanni Di Crescenzo, Elina van Kempen and Gene Tsudik	<b>9:20-9:30</b>	
	<b>10:00-10:20</b> <b>Spoofing-robust speaker verification based on time-domain embedding</b> Avishai Weizman, Yehuda Ben-Shimol and Itshak Lapi	<b>9:30-9:40</b>	
		<b>9:40-</b>	

	<b>10:20-10:40</b>	<b>A Probabilistic Model for Rounding Errors: A New Look at the Table-Maker's Dilemma</b> Jonathan Devor, Daniel Khankin, and Oded Margalit	<b>9:50</b>	
	<b>Short: 10:40-10:50</b>	<b>Behavior-Driven Access Policy Prediction</b> Shmuel Amour and Ehud Gudes	<b>9:50-10:00</b>	
<b>10:50-12:50 Israel Time GMT +2</b>	<b>Academic Track: Mid-Morning Session</b> Moderator:		<b>PhD/ Masters Track Session 2:</b> Moderator:	
	<b>10:50-11:10</b>	<b>Provable Imbalanced Point Clustering</b> David Denisov, Dan Felmdan, Shlomi Dolev and Michael Segal	<b>10:45-10:50</b>	Welcome and Instructions
	<b>11:30-11:50</b>	<b>Mezzo TLS 1.3 protocol, suitable for transmitting already-encrypted data</b> Nir Drucker and Shay Gueron	<b>10:50-11:00</b>	
	<b>11:50-12:10</b>	<b>LLMSecCode: Evaluating Large Language Models for Secure Coding</b> Anton Rydén, Erik Näslund, Elad Michael Schiller and Magnus Almgren	<b>11:00-11:10</b>	
	<b>12:10-12:30</b>	<b>Distributed Verifiable Random Function with Compact Proof</b> Ahmet Ramazan Ağırtaş, Arda Buğra Özer, Zülfükar Saygı and Oğuz Yayla	<b>11:10-11:20</b>	
	<b>Short: 12:30-12:40</b>	<b>On the overflow and p-adic theory applied to homomorphic encryption</b> Jacob Blindenbach, Jung Hee Cheon, Gamze Gursoy and Jiayi Kang	<b>11:20-11:30</b>	
	<b>Short: 12:40-12:50</b>	<b>Beneath the Cream: Unveiling Relevant Information Points from CrimeBB with Its Ground Truth Labels</b> Felipe Moreno, Daniel Sadoc Menasche and Cabral Lima	<b>11:30-11:40</b>	
			<b>11:40-11:50</b>	
		<b>11:50-12:00</b>		

<b>13:00-13:45 Israel Time GMT +2</b>	<b>Keynote Speaker 2: Esti Peshin</b> VP & General Manager of the Cyber Division at the Israel Aerospace Industries Ltd. <b>Talk Titled: TBA</b>  Hosted by: Michael Elhadad			
<b>13:50-14:40 Israel Time GMT +2</b>	<b>Academic Track: Noon Session</b> Moderator:			<b>Entrepreneurship Session 2:</b> Moderator:
	<b>13:50-14:10</b>	<b>Fiat-Shamir in the Wild</b> Duy Hieu Nguyen, Huynh Thanh Uyen Ho and Alex Biryukov	<b>12:20-12:30</b>	Welcome and Instructions
	<b>12:40-13:00</b>	<b>Predicting the degradation rate of technical systems at early stages of development</b> Sergey Frenkel	<b>12:30-12:40</b>	
	<b>13:00-13:20</b>	<b>Brief Announcement: Reminisce for Securing Private-keys in Public</b> Shlomi Dolev, Komal Kumari, Sharad Mehrotra, Baruch Schieber and Shantanu Sharma	<b>12:40-12:50</b>	
	<b>13:20-13:40</b>	<b>Minimally Intrusive Access Management to CDNs based on Models and Access Patterns</b> Lenise Rodrigues, Daniel Menasché, Arthur Serra and Antônio Rocha	<b>13:00-13:00</b>	
	<b>Short: 13:40-14:00</b>	<b>Cybersecurity Enhancement for Wireless Networks Using Aerial Reconfigurable Intelligent Surfaces</b> Rajnish Kumar and Shlomi Arnon	<b>13:00-13:10</b>	
	<b>Short: 14:00-14:10</b>	<b>KNN+X</b> Daniel Gilkarov, Lee-Ad Gottlieb and Hillel Oyahon	<b>13:10-13:40</b>	<b>Voting for the Three Best Pitches and wrapping up the session.</b> The three best pitches will present their pitches again for 5 minutes each in front of the whole audience (main room) from 16:50-17:20, for a finalist to be chosen.
	<b>Short: 14:10-14:20</b>	<b>(Short Paper) Challenges in Timed-Cryptography: A Position Paper</b> Karim Eldefrawy, Benjamin Turner and Moti Yung		

<p><b>14:20</b> <b>14:40</b> <b>Israel</b> <b>Time</b> <b>GMT</b> <b>+2</b></p>	<p><b>Pitch Finalist Ceremony</b> <i>Hosted By:</i></p> <p><b>The three finalists from the Entrepreneurship (Pitch) Track will have 5 minutes to present their pitch again before the entire audience of CSCML. Then the audience will get to vote for the best pitch.</b></p>		
<p><b>14:40-</b> <b>15:25</b> <b>Israel</b> <b>Time</b> <b>GMT</b> <b>+2</b></p>	<p><b>Keynote Speaker 3: Roberto Baldoni</b> Former Director General at National Cybersecurity Agency of Italy <b>Talk Titled: IBA</b></p> <p>Hosted by: Mirosław Kutylowski</p>		
<p><b>15:30-</b> <b>17:40</b> <b>Israel</b> <b>Time</b> <b>GMT</b> <b>+2</b></p>	<p><b>Academic Track: Evening Session</b> <i>Moderator:</i></p>		
	<p><b>15:30-</b> <b>15:50</b></p>	<p><b>On the Effects of Neural Network-based Output Prediction Attacks on the Design of Symmetric-key Ciphers</b> Hayato Watanabe, Ryoma Ito and Toshihiro Ohigashi</p>	
	<p><b>15:50-</b> <b>16:10</b></p>	<p><b>Entanglement-based Mutual Quantum Distance Bounding</b> Aysajan Abidin, Karim Eldefrawy and Dave Singelee</p>	
	<p><b>16:10-</b> <b>16:30</b></p>	<p><b>Evaluation of Posits for Spectral Analysis Using a Software-Defined Dataflow Architecture</b> Sameer Deshmukh, Daniel Khankin, William Killian, John Gustafson and Elad Raz</p>	
	<p><b>Short:</b> <b>16:30-</b> <b>16:40</b></p>	<p><b>OWF Candidates Based on: Xors, Error Detection Codes, Permutations, Polynomials, Interaction, and Nesting</b> Paweł Cyprys, Shlomi Dolev and Oded Margali</p>	
	<p><b>Short:</b> <b>16:40-</b> <b>16:50</b></p>	<p><b>Super-Teaching in Machine Learning</b> Dina Barak-Pelleg, Daniel Berend and Aryeh Kontorovich</p>	
	<p><b>Short:</b> <b>16:50-</b> <b>17:00</b></p>	<p><b>A Lattice Attack Against a Family of RSA-like Cryptosystems</b> George Teseleanu</p>	
	<p><b>Short:</b> <b>17:10-</b> <b>17:20</b></p>	<p><b>On the security-related properties of randomly constructed combinatorial structures</b> Vasiliki Liagkou, Panagiotis Nastou, Paul Spirakis and Yannis Stamatiou</p>	

	<b>Short:</b> <b>17:20-17:30</b>	<b>HBSS+: Simple Hash-Based Stateless Signatures revisited</b> Przemysław Kubiak and Oliwer Sobolewski	
<b>17:35</b> <b>18:00</b> <b>Israel</b> <b>Time</b> <b>GMT+2</b>		<b>Closing Ceremony/ Blessing</b>  <b>Hosted by: Professor Shlomi Dolev</b>	

**Friday, December 20 2024**

<b>Time</b>	<b>Event</b>
<b>11:00-11:15</b> <b>Israel Time</b> <b>GMT+2</b>	<b>Welcome</b> Hosted by: Professor Shlomi Dolev

<p><b>11:20-12:00</b>  <b>Israel Time</b>  <b>GMT+2</b></p>	<p><b>Keynote Speaker 3: Elad Raz</b>  <b>Founder of NextSilicon</b>  <b>Talk Titled: Reimagining Innovation: Overcoming Challenges to Lead the Next Generation of Compute</b></p> <p>Hosted by: Oded Margalit</p>
<p><b>12:05-12:45</b>  <b>Israel Time</b>  <b>GMT+2</b></p>	<p><b>Keynote Speaker 4: Claire Vishik</b>  <b>Senior Director of Trust Technology &amp; Policy and a Senior Principal Engineer at Intel.</b>  <b>Talk Titled: TBA</b></p> <p>Hosted by:</p>
<p><b>12:45-13:25</b>  <b>Israel Time</b>  <b>GMT+2</b></p>	<p><b>Keynote Speaker 5: Sol (Shlomo) Gradman</b>  <b>CEO ASG Ltd., Chairman, Israel High Tech CEO Forum, [Founder of ChipEx, iNOVEX, DevelopEX &amp; Silicon Club]</b>  <b>Talk Titled: TBA</b></p> <p>Hosted by: Shlomi Dolev</p>
<p><b>13:25-14:05</b>  <b>Israel Time</b>  <b>GMT+2</b></p>	<p><b>ZOOM LECTURE – ISRAEL IN BIBLICAL TIMES</b></p>
<p><b>14:05-14:30</b>  <b>Israel Time</b>  <b>GMT+2</b></p>	<p><b>Closing Ceremony/ Blessing</b></p> <p><b>Hosted by: Professor Shlomi Dolev</b></p>