



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

December 19-20, 2024

Final Full Program Schedule

Thursday, December 19, 2024

Time	Main Room/ Academic Research Track	Other Tracks	
8:00-8:10 Israel Time UTC +2	Opening Speech: Professor Shlomi Dolev		
8:15-08:55 Israel Time UTC +2	Keynote Speaker 1: Andrew C. Yao Dean of the Institute for Interdisciplinary Information Sciences (IIS) at Tsinghua University Talk Titled: <i>Cryptography in the Age of Bio, Quantum and AI</i> Hosted By: Giuseppe Persiano	CAPTURE THE FLAG	
		8:15-8:45	Zoom Meeting to open the competition.
9:00-10:40 Israel Time UTC +2	Academic Track: Morning Session Moderator: Michael Elhadad	PhD/ Masters Track Session 1: Moderator: Oded Margalit	
	9:00-9:20	Polynomial Adaptation of Large-Scale CNNs for Homomorphic Encryption-Based Secure Inference Moran Baruch, Nir Drucker, Gilad Ezov, Eyal Kushnir, Jenny Lerner, Yoav Goldberg, Omri Soceanu and Itamar	9:05-9:10 Welcome and Instructions
	9:20-9:40	Evaluation of Posits for Spectral Analysis Using a Software-Defined Dataflow Architecture Sameer Deshmukh, Daniel Khankin, William Killian, John Gustafson, and Elad Raz	9:10-9:20 Ad Hoc Blockchain for Private Contracts Hillel Avni, Shir Buchner, Shlomi Dolev, and Moti Yung
	9:40-10:00	Robust Secure Aggregation for Co-located IoT Devices with Corruption Localization Giovanni Di Crescenzo, Elina van Kempen and Gene Tsudik	9:20-9:30 Deep Learning-based Network Intrusion Detection System using Image Data Leonard Mutembei, Makhamisa Senekane and Terence van Zyl
	10:00	Spoofing-robust speaker verification based on time-domain embedding	9:30-9:40 Emergency Vehicle Accommodation in Dynamic Traffic Scheduling Amit Hendin

	10:20	Avishai Weizman, Yehuda Ben-Shimol and Itshak Lapi	9:40-9:50	Fast Real-World Classification of ECH-enabled Applications Yizhak Kahana, Yaakov Stein, Gabriel Zigelboim and Oren Glickman
	Short: 10:20-10:30	A Probabilistic Model for Rounding Errors: A New Look at the Table-Maker's Dilemma Jonathan Devor, Daniel Khankin, and Oded Margalit		
	Short: 10:30-10:40	Behavior-Driven Access Policy Prediction Shmuel Amour and Ehud Gudes	9:50-10:00	Bloom Filter Look-Up Tables for Private and Secure Distributed Databases in Web3 Shlomi Dolev, Ehud Gudes, and Daniel Shlomo
10:50-12:50 Israel Time UTC +2	Academic Track: Mid-Morning Session Moderator: Daniel Sadoc Menasche		PhD/ Masters Track Session 2: Moderator: Oded Margalit	
	10:50-11:10	Provable Imbalanced Point Clustering David Denisov, Dan Felmdan, Shlomi Dolev and Michael Segal	10:45-10:50	Welcome and Instructions
	11:30-11:50	Mezzo TLS 1.3 protocol, suitable for transmitting already-encrypted data Nir Drucker and Shay Gueron	10:50-11:00	LLM-Based De-Anonymization Shlomi Dolev and Rie Ruash
	11:50-12:10	LLMSecCode: Evaluating Large Language Models for Secure Coding Anton Rydén, Erik Näslund, Elad Michael Schiller and Magnus Almgren	11:00-11:10	Non-tandem spoofing robust speaker verification Technical Report Amro Asali, Yehuda Ben-Shimol and Itshak Lapidot
	12:10-12:30	Distributed Verifiable Random Function with Compact Proof Ahmet Ramazan Ağırtaş, Arda Buğra Özer, Zülfükar Saygı and Oğuz Yayla	11:10-11:20	Teaching CS101 Using Competitive Programming Ofar Wald, Judith Gal-Ezer and Nezer Zaidenberg
	Short: 12:30-12:40	On the overflow and p-adic theory applied to homomorphic encryption Jacob Blindenbach, Jung Hee Cheon, Gamze Gursoy and Jiayi Kang	11:20-11:30	Finding a Vertex-wise Minimum Depth Tree\ Among the Shortest Path Trees Omer Asher, Yefim Dinitz, Shlomi Dolev, and Li-On Raviv
	Short:	Beneath the Cream: Unveiling Relevant Information Points	11:30-11:40	LLMs Hallucinations Prevention via Automated Reality Confrontations Shlomi Dolev and Ilia Mashevitsky

12:40- **from CrimeBB with Its Ground Truth Labels**
12:50 Felipe Moreno, Daniel Sadoc Menasche and Cabral Lima

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<p>13:00-13:45 Israel Time UTC +2</p>	<p>Keynote Speaker 2: Esti Peshin VP & General Manager of the Cyber Division at the Israel Aerospace Industries Ltd. Talk Titled: <i>Cyber Resilience in the AGI Era</i></p> <p>Hosted by: Michael Elhadad</p>			
<p>13:50-14:40 Israel Time UTC +2</p>	<p>Academic Track: Noon Session Moderator: Gaurav Kumar Srivastava</p>			<p>Entrepreneurship Session: Moderator: Yonah Alexandre Bronstein</p>
	<p>13:50-14:10</p>	<p>Fiat-Shamir in the Wild Duy Hieu Nguyen, Huynh Thanh Uyen Ho and Alex Biryukov</p>	<p>12:20-12:30</p>	<p>Welcome and Instructions</p>
	<p>12:40-13:00</p>	<p>Predicting the degradation rate of technical systems at early stages of development Sergey Frenkel</p>	<p>12:30-12:40</p>	<p>Development of Assistive Technologies for injured IDF veteran Professor Shlomi Arnon</p>
	<p>13:00-13:20</p>	<p>Reminisce for Securing Private-keys in Public Shlomi Dolev, Komal Kumari, Sharad Mehrotra, Baruch Schieber and Shantanu Sharma</p>	<p>12:40-12:50</p>	<p>Stargo Tal Einhoren</p>
	<p>13:20-13:40</p>	<p>Minimally Intrusive Access Management to CDNs based on Models and Access Patterns Lenise Rodrigues, Daniel Menasché, Arthur Serra and Antônio Rocha</p>	<p>12:50-13:00</p>	<p>Objective pain measurement Dr. Segal Yoram</p>
	<p>13:40-14:00</p>	<p>Cybersecurity Enhancement for Wireless Networks Using Aerial Reconfigurable Intelligent Surfaces Rajnish Kumar and Shlomi Arnon</p>	<p>13:00-13:10</p>	<p>Reconstruction of The Attack Graph in DDoS Attacks Dina Barak</p>
			<p>13:10-13:20</p>	<p>BiolomiX David Toubiana</p>
			<p>13:20-13:30</p>	<p>BioSOC: Cybersecurity-Inspired Biosecurity Platform for Synthetic DNA Screening Vladislav Kogan</p>
		<p>13:30-13:40</p>	<p>Nerlnet David Leon</p>	

	Short: 14:00- 14:10	KNN+X Daniel Gilkarov, Lee-Ad Gottlieb and Hillel Oyahon	
	Short: 14:10- 14:20	Challenges in Timed-Cryptography: A Position Paper Karim Eldefrawy, Benjamin Turner and Moti Yung	

14:20 14:40 Israel Time UTC +2	<p>Pitch Finalist Ceremony <i>Hosted By: Yonah Alexandre Bronstein</i></p> <p>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.</p>	<p>Voting for the Three Best Pitches and wrapping up the session. The three best pitches will present their pitches again for 5 minutes each in front of the whole audience (main room) from 14:20 to 14:40, for a finalist to be chosen.</p>														
14:40- 15:25 Israel Time UTC +2	<p>Keynote Speaker 3: Roberto Baldoni Former Director General at National Cybersecurity Agency of Italy Talk Titled: <i>Charting Digital Sovereignty</i></p> <p>Hosted by: Mirosław Kutylowski</p>															
15:30- 17:30 Israel Time UTC +2	<p>Academic Track: Evening Session Moderator: <i>Dayana Dyachenko</i></p> <table border="1" data-bbox="220 565 1119 1521"> <tr> <td data-bbox="220 565 388 651"> 15:30- 15:50 </td> <td data-bbox="388 565 1119 651"> On the Effects of Neural Network-based Output Prediction Attacks on the Design of Symmetric-key Ciphers Hayato Watanabe, Ryoma Ito and Toshihiro Ohigashi </td> </tr> <tr> <td data-bbox="220 651 388 760"> 15:50- 16:10 </td> <td data-bbox="388 651 1119 760"> Entanglement-based Mutual Quantum Distance Bounding Aysajan Abidin, Karim Eldefrawy and Dave Singelee </td> </tr> <tr> <td data-bbox="220 760 388 868"> 16:10- 16:30 </td> <td data-bbox="388 760 1119 868"> Password-authenticated Cryptography from Consumable Tokens Ghada Almashaqbe </td> </tr> <tr> <td data-bbox="220 868 388 977"> Short: 16:30- 16:40 </td> <td data-bbox="388 868 1119 977"> OWF Candidates Based on: Xors, Error Detection Codes, Permutations, Polynomials, Interaction, and Nesting Paweł Cyprys, Shlomi Dolev and Oded Margali </td> </tr> <tr> <td data-bbox="220 977 388 1086"> Short: 16:40- 16:50 </td> <td data-bbox="388 977 1119 1086"> Super-Teaching in Machine Learning Dina Barak-Pelleg, Daniel Berend and Aryeh Kontorovich </td> </tr> <tr> <td data-bbox="220 1086 388 1195"> Short: 16:50- 17:00 </td> <td data-bbox="388 1086 1119 1195"> A Lattice Attack Against a Family of RSA-like Cryptosystems George Teseleanu </td> </tr> <tr> <td data-bbox="220 1195 388 1304"> Short: 17:10- 17:20 </td> <td data-bbox="388 1195 1119 1304"> On the security-related properties of randomly constructed combinatorial structures Vasiliki Liagkou, Panagiotis Nastou, Paul Spirakis and Yannis Stamatiou </td> </tr> </table>	15:30- 15:50	On the Effects of Neural Network-based Output Prediction Attacks on the Design of Symmetric-key Ciphers Hayato Watanabe, Ryoma Ito and Toshihiro Ohigashi	15:50- 16:10	Entanglement-based Mutual Quantum Distance Bounding Aysajan Abidin, Karim Eldefrawy and Dave Singelee	16:10- 16:30	Password-authenticated Cryptography from Consumable Tokens Ghada Almashaqbe	Short: 16:30- 16:40	OWF Candidates Based on: Xors, Error Detection Codes, Permutations, Polynomials, Interaction, and Nesting Paweł Cyprys, Shlomi Dolev and Oded Margali	Short: 16:40- 16:50	Super-Teaching in Machine Learning Dina Barak-Pelleg, Daniel Berend and Aryeh Kontorovich	Short: 16:50- 17:00	A Lattice Attack Against a Family of RSA-like Cryptosystems George Teseleanu	Short: 17:10- 17:20	On the security-related properties of randomly constructed combinatorial structures Vasiliki Liagkou, Panagiotis Nastou, Paul Spirakis and Yannis Stamatiou	
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	Short: 17:20- 17:30	HBSS+: Simple Hash-Based Stateless Signatures revisited Przemysław Kubiak and Oliwer Sobolewski	
17:35 18:00 Israel Time UTC +2		Closing Ceremony/ Blessing Hosted by: Professor Shlomi Dolev	

Friday, December 20 2024

Time	Event
11:00-11:15 Israel Time UTC +2	Welcome Hosted by: Professor Shlomi Dolev
11:20-12:00 Israel Time UTC +2	Keynote Speaker 3: Elad Raz Founder of NextSilicon Talk Titled: Reimagining Innovation: Overcoming Challenges to Lead the Next Generation of Compute Hosted by: Oded Margalit
12:05-12:45 Israel Time UTC +2	Keynote Speaker 4: Claire Vishik Senior Director of Trust Technology & Policy and a Senior Principal Engineer at Intel. Talk Titled: Cognitive Hacking: New Frontier in Cybersecurity Hosted by: Shlomi Dolev
12:50-13:30 Israel Time UTC +2	Keynote Speaker 5: Sol (Shlomo) Gradman CEO ASG Ltd., Chairman, Israel High Tech CEO Forum, [Founder of ChipEx, iNOVEX, DevelopEX & Silicon Club] Talk Titled: East vs. West in the Age of Machine Learning & AI Hosted by: Shlomi Dolev
13:30-14:10 Israel Time UTC +2	Israeli Music Post October 7th Talk by Josh Hartuv
14:10-14:35 Israel Time UTC +2	Closing Ceremony/ Blessing Hosted by: Professor Shlomi Dolev