

CSCML 2020

Fourth International Symposium on Cyber Security, Cryptology, and Machine Learning

July 2-3, 2020, Beer-Sheva, Israel

<http://www.cs.bgu.ac.il/~fradmin/cscml20>

Dates: Submission deadline **February 14, 2020**;
Acceptance notification **March 20, 2020**; Camera-ready
copy due **March 31, 2020**

Partial List Academic Research Track PC

Adi Akavia *University of Haifa, Israel*
Gilad Asharov *Bar Ilan University, Israel*
Manuel Barbosa *University of Porto, Portugal*
Christina Boura *Versailles Saint-Quentin-en-Yvelines Univ., France*

Carlo Blundo *University of Salerno, Italy*
Ashish Choudhury *IIT Bangalore, India*
Camil Demetrescu *Sapienza University, Italy*
Orr Dunkelman *University of Haifa, Israel*
Klim Efremenko *Ben Gurion University, Israel*
Marc Fischlin *TU Darmstadt, Germany*
Dror Fried *The Open University, Israel*
Benjamin Fuller *University of Connecticut, USA*
Shay Gueron *University of Haifa and AWS, Israel*
Ofer Hadar *Ben Gurion University, Israel*
David Heath *Georgia Tech, USA*
Vladimir Kolesnikov **PC Co-Chair, Georgia Tech, USA**
Ben Kreuter *Google, USA*
Miroslaw Kutylowski *Wroclaw Univ. of Tec, Poland*

Mark Last *Ben Gurion University, Israel*
Riccardo Lazzaretto *Sapienza University, Italy*
Daniel Masny *VISA Research, USA*
Svetla Nikova *KU Leuven, Belgium*
Ryo Nishimaki *NTT, Japan*
Ariel Nof *Bar-Ilan University, Israel*
Giuseppe Persiano *University of Salerno, Italy*
Thomas Peyrin *Nanyang Tec Univ. Singapore*

Antigoni Polychroniadou *JPMorgan AI Research, USA*
Alessandra Scafuro *NC State University, USA*
Berry Schoenmakers *Eindhoven Univ. of Tec, Holland*

Gil Segev *Hebrew University, Israel*
Sandeep Shukla *IIT Kanpur, India*
Anatoly Shusterman *Ben Gurion University, Israel*
David Starobinski *Boston University, USA*
Ni Trieu *Oregon State University, USA*
Doug Tygar *UC Berkeley, USA*
Daniele Venturi *Sapienza University of Rome, Italy*
Gera Weiss **PC Co-Chair, Ben-Gurion University, Israel**
Ruoyu Wang *Arizona State University, USA*
Avishay Yanay *Bar-Ilan University, Israel*
Stefano Zanero *Politecnico di Milano University, Italy*
Vassilis Zikas *University of Edinburgh, Britain*

Partial List Entrepreneurship Track PC

Dan Arazi *Keirtsu Forum Israeli Chapter, Israel*
Gil Arazi *FinTLV, Israel*
Avi Arnon *Citi Ventures, Israel*
Ran Bar-Sella *Elbit Systems, Israel*
Gilad Barzilay *Ford Research Center, Israel*
Shlomi Dolev *BGU-NHSA and SDO, Israel*
Gili Elkin *Israel-Colorado Innovation Fund, Israel*
Ben Gilad *Tata Consultancy Services, Israel*
Tal Gilor *Labs2, Israel*
Nimrod Gindi *Mellanox, Israel*
Roman Gold *JSCapital, Israel*
Ittai Harel *Pitango Venture Capital, Israel*
Rafael Maman *PwC, Israel*
Itzik Mizrahi *Glilot Capital Partners, Israel*
Dov Moran *Grove Ventures, Israel*
Atad Peled *Red Dot Capital, Israel*
Gadi Porat *JVP Cyber Labs, Israel*
Michael Rodeh *Permira and Land Expand, Israel*
Zohar Rozenberg *Elron Ltd, Israel*
Benny Schnaider *Salto, Israel*
Ofer Schreiber *YL Ventures, Israel*
Yuval Shachar *Team8, Israel*
Elad Shemesh *TGT, Israel*
Javier Shocron *Maverick Ventures, Israel*
Doron Ariel Shpasser *E.ON, Israel*
Gil Solomon *Gil Solomon CO, Israel*
Gadi Tirosh *JVP, Israel*
Yaron Wolfsthal *IBM, Israel*
Guy Zbarsky *AltaIR Capital, Israel*

Chairs and Conference Committee: Vladimir Kolesnikov, PC Co-Chair *Georgia Tech, USA*; Gera Weiss, PC Co-Chair *Ben-Gurion Univ., Israel*; Simcha Mahler, Org. Chair *Ben-Gurion Univ., Israel*

Steering Committee: Orna Berry *DELLEMC, Israel*; Shlomi Dolev, Chair *Ben-Gurion Univ., Israel*; Yuval Elovici *Ben-Gurion Univ., Israel*; Bezalel Gavish *Southern Methodist Univ., USA*; Ehud Gudes *Ben-Gurion Univ., Israel*; Jonathan Katz *Univ. of Maryland, USA*; Rafail Ostrovsky *UCLA, USA*; Jeffrey D. Ullman *Stanford Univ., USA*; Kalyan Veeramachaneni *MIT, USA*; Yaron Wolfsthal *IBM, Israel*; Moti Yung *Columbia Univ. & Google, USA*

Scope. Original contributions to the theory, design, analysis, implementation, or application of cyber security, cryptography and machine learning systems and networks. In particular, *conceptually innovative results* are solicited. Topics of interest include, but are not limited to:

• **Cyber Security Design** Secure Software Development methodologies, Formal methods, Semantics and verification of secure systems, Fault tolerance, Reliability, Availability of distributed secure systems, Game-theoretic approaches to secure computing, Automatic recovery, Self-stabilizing, and self-organizing systems, Communication, Authentication and identification, Cyber security for mobile and Internet of Things, Cyber security of corporations, Security and privacy for cloud, Edge and fog computing, Cryptocurrency, and Blockchain. • **Cryptology** Cryptographic implementation analysis and construction, Secure multi-party computation, Privacy-enhancing technologies and anonymity, Post-quantum cryptography and security. • **Machine Learning & Big Data** Anomaly detection and malware identification, Business Intelligence and Security, Digital forensics, Digital rights management, Trust management and reputation systems, Information retrieval, Risk analysis, DoS

Conference presentations will have two formats (you can find more information about the formats from last years event by clicking on the following link: <https://www.cs.bgu.ac.il/fradmin/cscml20/submission.html>):

1. Regular presentations of 20-25 minutes accompanied by papers of up to 15 pages in the proceedings. This form is intended for contributions reporting on original research, submitted exclusively to this conference.

2. Brief Announcements of 5-10 minutes accompanied by papers of up to 4 pages in the proceedings. Such submissions may describe work in progress or work presented elsewhere. The title of a brief announcement must begin with "Brief Announcement:".

3. Entrepreneurship pitch of 5-10 minutes accompanied by six page abstracts/pitch presentation. (See also:

<https://www.cs.bgu.ac.il/frankel/TechnicalReports/2019/19-01.pdf>)

Submission. Papers are to be submitted electronically, following the guidelines available on the conference web page.

Each submission must be in English, in PDF format, and begin with a cover page including: (1) the title, (2) the names and affiliations of all authors, (3) contact author's email, address and telephone number, (4) a brief, one paragraph abstract of the paper, (5) indication whether the paper is a regular submission, or an entrepreneurship pitch submission (the authors of the entrepreneurship pitch track please note that the submissions will not be NDA protected).

A regular submission must not exceed 15 (LNCS formatted) single-column pages (excluding cover page and references). Additional necessary details may be included in a clearly marked appendix that will be read at the discretion of the program committee. An entrepreneurship pitch submission must not exceed 6 single-column pages. All submissions must use LNCS format. Any submission deviating from these guidelines may be rejected without consideration of its merit.

It is recommended that a regular submission begin with a succinct statement of the problem or the issue being addressed, a summary of the main results or conclusions, a brief explanation of their significance, a brief statement of the key ideas, and a comparison with related work, all tailored to a non-specialist. Technical development of the work, directed to the specialist, should follow. Papers outside of the conference scope will be rejected without review. If requested by the authors on the cover page, a regular submission can also be considered for the entrepreneurship pitch track.

Additional Planned Events. PhD Track and "Capture the Flag" Hackathon are planned to take place at CSCML 2020.

Publication. Regular papers will be included in the Springer LNCS conference proceedings. Extended and revised versions of selected papers will be considered for a special issue of the journal *Information and Computation*.