CSCML 2021
Fifth International Symposium on Cyber Security, Cryptology, and Machine Learning
July 8-9, 2021, Beer-Sheva, Israel

http://www.cs.bgu.ac.il/~fradmin/cscml21 and http://www.cscml.org

Dates: Submission deadline **February 14, 2021**; Acceptance notification **March 21, 2021**; Camera-ready copy due **March 31, 2021**

Keynote Speakers: Steve Blank-Serial Entrepreneur, one of the founding fathers of Silicon Valley. **Bruce Schneier**-Fellow, Harvard Kennedy School of Government and internationally renowned security technologist. **Nir Zuk**-Founder and CTO, Palo Alto Networks.

Partial List Academic Research Track PC

Adi Akavia	*University of Haifa, Israel*
Don Beaver	*FOR.ai, USA*
Carlo Blundo	*Università degli Studi di Salerno, Italy*
Christina Boura	*University of Versailles, France*
Lucas Davi	*University Duisburg-Essen, Germany*
Camil Demetrescu	*Sapienza University of Rome, Italy*
Itai Dinur	*Ben Gurion University, Israel*
Orr Dunkelman	*University of Haifa, Israel*
Eman El-Sheikh	*University of West Florida, USA*
Chen Feng	*University of British Columbia Okanagan, Canada*
Rosario Gennaro	*City University of New York, USA*
Shay Gueron	*University of Haifa and Intel Corporation, Israel*
David Hay	*The Hebrew University, Israel*
Amir Herzberg	*University of Connecticut, USA*
Çetin Kaya Koç	*University of California Santa Barbara, USA*
Vladimir Kolesnikov	*Georgia Institute of Technology, USA*
Łukasz Krzywiecki	*Wrocław Univ. of Science and Tech., Poland*
Oded Margalit	**PC Co-Chair**, *Ben Gurion University, Israel*
Ana Milanova	*Rensselaer Polytechnic Institute, USA*
Tal Moran	*IDC Herzliya, Israel*
David Naccache	*ENS, France*
Ariel Nof	*Technion, Israel*
Nisha Panwar	*Augusta University, USA*
Giuseppe Persiano	*Università di Salerno, Italy*
Benny Pinkas	**PC Co-Chair**, *Bar Ilan University, Israel*
Leo Reyzin	*Boston University, USA*
Eyal Ronen	*Tel Aviv University, Israel*
Tirza Routtenberg	*Ben Gurion University, Israel*
Alexander Russell	*University of Connecticut, USA*
Baruch Schieber	*New Jersey Institute of Technology, USA*
Alexander Schwarzmann	**PC Co-Chair**, *Augusta Univ., USA*
Sandeep Shukla	*IIT Kanpur, India*
Moshe Sipper	*Ben Gurion University, Israel*
Yannis Stamatiou	*University of Patras, Greece*
Uri Stemmer	*Ben Gurion University, Israel*
Daniel Takabi	*Georgia State University, USA*
Qiang Tang	*New Jersey Institute of Technology, USA*
Nikos Triandopoulos	*Stevens Institute of Technology, USA*
Eran Tromer	*Tel Aviv University, Israel*
Qianhong Wu	*Beihang University, China*
Marten van Dijk	*CWI, Amsterdam, Netherlands*
Thijs Veugen	*TNO and CWI, Netherlands*

Partial List Entrepreneurship Track PC

Yoav Anaki	*fresh.fund, Israel*
Gil Arazi	*FinTLV Ventures, Israel*
Avi Arnon	*Citi Ventures, Israel*
Itay Attar	*Crossroads VC, Israel*
Ran Bar-Sella	*Elbit Systems, Israel*
Gilad Barzilay	*Ford Research Center, Israel*
Aviad Ben-Laish	*Accenture Ventures, Israel*
Ben Bernstein	*ICONiQ Growth, Israel*
Dror Berman	*Innovation Endeavors, USA*
Yoni Blau	*Remagine Ventures, Israel*
Yodfat Harel Buchris	*Blumberg Capital, Israel*
Netta Cohen	*Incubit Ventures, Israel*
Shlomi Dolev	**PC Co-Chair**, *BGU-NHSA, Israel*
Dorit Dor	*Check Point, Israel*
Rotem Eldar	*10D, Israel*
Sharin Fisher	*Fort Ross VC, Israel*
Ben Gilad	*Tata Consultancy Services, Israel*
Tal Gilor	*Labs/08, Israel*
Nimrod Gindi	*Nvidia, Israel*
Roman Gold	*VentureIsrael, Israel*
Ayal Itzkovitz	*Pitango Venture Capital, Israel*
Efrat Judovits	*Achieved Technologies, USA*
Arik Kleinstein	*Glilot Capital Partners, Israel*
Limor Lahiani	*Microsoft, Israel*
Oded Margalit	**PC Co-Chair**, *Ben Gurion University, Israel*
Agada Nameri	*iAngel, Israel*
Eitan Naor	*IN Venture, Israel*
Atad Peled	*Red Dot Capital, Israel*
Gadi Porat	*JVP Cyber Labs, Israel*
Nicole Priel	*Ibex Investors, Israel*
Moshe Sarfaty	*Aristagora VC, Israel*
Benny Schnaider	*Salto, Israel*
Ofer Schreiber	*YL Ventures, Israel*
Yuval Shachar	*Team8, Israel*
Yosef Shaftal	*Israeli Blockchain Association, Israel*
Yair Shoham	*Intel Capital, Israel*
Doron Ariel Shpasser	*E.ON, Israel*
Yoram Snir	*83NORTH, Israel*
Nethanel Sztrum	*Deutsche Telekom VC, Israel*
Yaron Wolfsthal	*IBM, Israel*
Oren Yunger	*GGV Capital, USA*
Guy Zbarsky	*AltaIR Capital, Israel*
Reut Zeiri	*lool Ventures, Israel*

Chairs and Conference Committee: Shlomi Dolev, **Chair** *Ben-Gurion Univ., Israel*; Oded Margalit, PC Co-Chair *Ben-Gurion Univ., Israel*; Benny Pinkas, PC Co-Chair *Bar-Ilan Univ., Israel*; Alexander Schwarzmann, PC Co-Chair *Augusta Univ., USA*; Amanda Lapidot, 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 year's 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 Announcments 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*.