

## Feder Prize - ALL Winners

YEAR	PRIZE	WINNER	SUPERVISOR	WORK
2024	1 <sup>ST</sup> Prize	<b>Boris Pismenny</b> Technion	<b>Prof. Dan Tsafir</b> and <b>Prof. Adam Morrison</b>	Alleviating Memory Bandwidth Bottlenecks in High Performance Networking Systems
	2 <sup>nd</sup> Prize	<b>Noa Vaknin</b> Hebrew University	<b>Prof. Oded Schwartz</b>	Minimizing communication for high performance matrix multiplication
	3 <sup>rd</sup> Prize	<b>Erez Zolkov</b> Technion	<b>Prof. Emanuel Cohen</b>	Integrated circuits architectures of blocker-tolerant receivers and frequency division duplex transceivers
YEAR	PRIZE	WINNER	SUPERVISOR	WORK
	1 <sup>ST</sup> Prize	<b>Doron Cohen</b> Ben Gurion University	<b>Prof. Aryeh Kontorovich</b>	Adaptive estimation in infinite dimensions
	2 <sup>nd</sup> Prize	<b>Yonatan Shadmi</b> Technion	<b>Prof. Rami Atar</b>	Scaling limits of probabilistic models in communication networks

<b>2023</b>	<b>3<sup>rd</sup> Prize</b>	<b>Roni Con</b> Tel Aviv University	<b>Prof. Itzhak Tamo</b> <b>Prof. Amir Shpilka</b>	Modern applications of Reed-Solomon codes
	<b>3<sup>rd</sup> Prize</b>	<b>Tomer Berg</b> Tel Aviv University	<b>Prof. Ofer Shayevitz</b> <b>Prof. Or Ordentlich</b>	Inference under memory constraints
<b>YEAR</b>	<b>PRIZE</b>	<b>WINNER</b>	<b>SUPERVISOR</b>	<b>WORK</b>
<b>2022</b>	<b>1<sup>ST</sup> Prize</b>	<b>Rana Shahout</b> Technion	<b>Prof. Roy Friedman</b>	Real time flow monitoring
	<b>2<sup>nd</sup> Prize</b>	<b>Eliran Kachlon</b> Tel Aviv University	<b>Prof. Benny Applebaum</b>	Topics in the complexity of cryptography
	<b>3<sup>rd</sup> Prize</b>	<b>Roy Karasik</b> Technion	<b>Prof. Shlomo Shamai</b>	On information-theoretic aspects of modern wireless communications
<b>YEAR</b>	<b>PRIZE</b>	<b>WINNER</b>	<b>SUPERVISOR</b>	<b>WORK</b>
<b>2021</b>	<b>1<sup>ST</sup> Prize</b>	<b>Elad Romanov</b> Hebrew University	<b>Dr. Or Ordentlich</b> <b>Dr. Matan Gavish</b>	Fundamental limits and algorithms for some estimation problems
	<b>2<sup>nd</sup> Prize</b>	<b>Eshed Ram</b> Technion	<b>Prof. Yuval Cassuto</b>	LDPC codes with sub-block locality

	<b>3<sup>rd</sup> Prize</b>	<b>Uri Meir</b> Tel Aviv University	<b>Prof. Rotem Oshman</b>	Distribution testing in distributed models
<b>YEAR</b>	<b>PRIZE</b>	<b>WINNER</b>	<b>SUPERVISOR</b>	<b>WORK</b>
<b>2020</b>	<b>1<sup>ST</sup> Prize</b>	<b>Roy Zektzer</b> Hebrew University	<b>Prof. Uriel Levy</b>	Integration of nanophotonic structures with atoms and molecules for on-chip frequency reference and all optical modulation
	<b>Joint 2<sup>nd</sup> Prize</b>	<b>Elad Domanovitz</b> Tel Aviv University	<b>Prof. Uri Erez</b>	Diversity combining via universal dimension-reducing space-time transformations
	<b>Joint 2<sup>nd</sup> Prize</b>	<b>Assaf Ben-Yishai</b> Tel Aviv University	<b>Prof. Ofer Shayevitz</b>	Interaction in Gaussian and binary channels
<b>YEAR</b>	<b>PRIZE</b>	<b>WINNER</b>	<b>SUPERVISOR</b>	<b>WORK</b>
<b>2019</b>	<b>1<sup>ST</sup> Prize</b>	<b>Aviv Karnieli</b> Tel Aviv University	<b>Prof. Ady Arie</b>	Manipulation of frequency-domain photons for quantum communication
	<b>2<sup>nd</sup> Prize</b>	<b>Boaz Shuval</b> Technion	<b>Prof. Ido Tal</b>	Polarization for processes with memory

	<b>3<sup>rd</sup> Prize</b>	<b>Marina Haikin</b> Tel Aviv University	<b>Prof. Rami Zamir</b>	Analog coding frame-work
<b>YEAR</b>	<b>PRIZE</b>	<b>WINNER</b>	<b>SUPERVISOR</b>	<b>WORK</b>
<b>2018</b>	<b>1<sup>ST</sup> Prize</b>	<b>Eli Haim</b> Tel Aviv University	<b>Prof. Uri Erez</b> <b>Prof. Yuval Kochman</b>	Error probability bounds in information theory: Role of structure, performance criteria and decision rules
	<b>2<sup>nd</sup> Prize</b>	<b>Ori Golani</b> Tel Aviv University	<b>Prof. Mark Shtauf</b>	Nonlinear interference noise in optical fibers – properties, measurement, and applications
	<b>3<sup>rd</sup> Prize</b>	<b>Ran Ben Basat</b> Technion	<b>Prof. Roy Friedman</b>	Real time network measurements
<b>YEAR</b>	<b>PRIZE</b>	<b>WINNER</b>	<b>SUPERVISOR</b>	<b>WORK</b>
<b>2017</b>	<b>1<sup>ST</sup> Prize</b>	<b>Netanel Raviv</b> Technion	<b>Prof. Tuvi Etzion</b>	Applications of subspaces in coding theory
	<b>2<sup>nd</sup> Prize</b>	<b>Nir Weinberger</b> Technion	<b>Prof. Neri Merhav</b>	Large deviations for secure compression and communication
		<b>Oron Sabag</b> Ben Gurion University	<b>Prof. Haim Permuter</b>	On the feedback capacity of finite-state channels

	<b>3<sup>rd</sup> Prize</b>			
<b>YEAR</b>	<b>PRIZE</b>	<b>WINNER</b>	<b>SUPERVISOR</b>	<b>WORK</b>
<b>2016</b>	<b>1<sup>ST</sup> Prize</b>	<b>Ben Lee Volk</b> Tel Aviv University	<b>Prof. Amir Shpilka</b>	Efficiently decoding Reed-Muller codes
	<b>2<sup>nd</sup> Prize</b>	<b>Roei Remez</b> Tel Aviv University	<b>Prof. Ady Arie</b>	Super narrow frequency conversion
	<b>3<sup>rd</sup> Prize</b>	<b>Ziv Goldfeld</b> Ben Gurion University	<b>Prof. Haim Permuter</b>	Semantic security in the presence of active adversaries
<b>YEAR</b>	<b>PRIZE</b>	<b>WINNER</b>	<b>SUPERVISOR</b>	<b>WORK</b>
<b>2015</b>	<b>1<sup>ST</sup> Prize</b>	<b>Merav Parter</b> Weizmann Institute	<b>Prof. David Peleg</b>	The topology of wireless communication
	<b>2<sup>nd</sup> Prize</b>	<b>Nadav Segal</b> Tel Aviv University	<b>Dr. Tal Ellenbogen</b>	Controlling light by metamaterial based nonlinear photonic crystals
	<b>3<sup>rd</sup> Prize</b>	<b>Ilya Soloveychik</b> Hebrew University	<b>Dr. Ami Wiesel</b>	Non-Gaussian and structured covariance estimation
<b>YEAR</b>	<b>PRIZE</b>	<b>WINNER</b>	<b>SUPERVISOR</b>	<b>WORK</b>

<b>2014</b>	<b>1<sup>ST</sup> Prize</b>	<b>Wasim Huleihel</b> Technion	<b>Prof. Neri Merhav</b>	On the relations between information theory and statistical mechanics
	<b>2<sup>nd</sup> Prize</b>	<b>Ronen Dar</b> Tel Aviv University	<b>Prof. Meir Feder</b> <b>Prof. Mark Shtaif</b>	Nonlinear interference noise in fiber-optic communications systems
	<b>2<sup>nd</sup> Prize</b>	<b>Or Ordentlich</b> Tel Aviv University	<b>Prof. Uri Erez</b>	Integer-forcing for channels sources and ADCs
<b>YEAR</b>	<b>PRIZE</b>	<b>WINNER</b>	<b>SUPERVISOR</b>	<b>WORK</b>
<b>2013</b>	<b>1<sup>ST</sup> Prize</b>	<b>Amir Capua</b> Technion	<b>Prof. Gadi Eisenstein</b>	Direct probing of the electronic wave-function in room-temperature semiconductors: the road towards practical devices for quantum communication applications
	<b>2<sup>nd</sup> Prize</b>	<b>Yuval Lomnitz</b> Tel Aviv University	<b>Prof. Meir Feder</b>	Universal communication over unknown channels
	<b>3<sup>rd</sup> Prize</b>	<b>Tirza Routtenberg</b> Ben Gurion University	<b>Prof. Josef Tabrikian</b>	Non-Bayesian periodic Cramer-Rao bound
	<b>3<sup>rd</sup> Prize</b>	<b>Haya Shulman</b> Bar Ilan University	<b>Prof. Amir Herzberg</b>	Towards a secure domain name system

YEAR	PRIZE	WINNER	SUPERVISOR	WORK
2012	1 <sup>ST</sup> Prize	<b>Anatoly Khina</b> Tel Aviv University	Prof. Uri Erez	Network Modulation: A transmission technique for MIMO multi-user networks
	2 <sup>nd</sup> Prize	<b>Anton Andrusier</b> Tel Aviv University	Prof. Mark Shtaif	A scheme for disjoint detection in polarization multiplexed communication systems affected by polarization dependent loss
	2 <sup>nd</sup> Prize	<b>Itzhak Tamo</b> Ben Gurion University	Prof. Moshe Schwartz & Prof. Jehoshua Bruck	MDS array codes with optimal rebuilding
	Commendation Prize for Outstanding M.Sc. work	<b>Dor Shaviv</b> Technion	Prof. Yosef Steinberg	On the multiple-access channel with common rate-limited feedback
YEAR	PRIZE	WINNER	SUPERVISOR	WORK
2011	1 <sup>ST</sup> Prize	<b>Yuval Lomnitz</b> Tel Aviv University	Prof. Meir Feder	Communication over individual channels
	2 <sup>nd</sup> Prize	<b>Or Ordentlich</b> Tel Aviv University	Prof. Uri Erez	Cyclic codes Integer-forcing equalization
	2 <sup>nd</sup> Prize	<b>Kobi Cohen</b> Bar Ilan University	Prof. Amir Leshem	A time-varying opportunistic approach to lifetime maximization of wireless sensor networks

YEAR	PRIZE	WINNER	SUPERVISOR	WORK
2010	1 <sup>ST</sup> Prize	<b>Leonid Barenboim</b> Ben Gurion University	Prof. Michael Elkin	Efficient algorithms for medium access control using novel network decomposition techniques
	2 <sup>nd</sup> Prize	<b>Yuval Kochman</b> Tel Aviv University	Prof. Rami Zamir	Modulo-Lattice modulation: A semi-analog approach to communication
	2 <sup>nd</sup> Prize	<b>Yonatan Kaspi</b> Technion	Prof. Neri Merhav	Error exponents for broadcast channels with degraded message sets
YEAR	PRIZE	WINNER	SUPERVISOR	WORK
2009	1 <sup>ST</sup> Prize	<b>Nathan Levy</b> Technion	Prof. Shlomo Shamai Prof. Ofer Zeitouni	Information rates of different Wyner-like cellular models via product of random matrices theory
	2 <sup>nd</sup> Prize	<b>Ofer Shayevitz</b> Tel Aviv University	Prof. Meir Feder	Universal communication with feedback
	2 <sup>nd</sup> Prize	<b>Eran Sharon</b> Tel Aviv University	Prof. Simon Litsyn	Analysis and design of LDPC coding systems
YEAR	PRIZE	WINNER	SUPERVISOR	WORK
	1 <sup>ST</sup> Prize	<b>Moran Gariby</b> Tel Aviv University	Prof. Rami Zamir	The most favorable impulsive interference for ternary CDMA



<b>2008</b>	<b>2<sup>nd</sup> Prize</b>	<b>Avi Steiner</b> Technion	<b>Prof. Shlomo Shamai</b>	The multi-layer broadcast approach for fading channels
	<b>2<sup>nd</sup> Prize</b>	<b>Boris Kapchits</b> Technion	<b>Prof. Reuven Cohen</b>	Wake-up scheduling algorithm for minimizing energy consumption in a Mesh sensor network
<b>YEAR</b>	<b>PRIZE</b>	<b>WINNER</b>	<b>SUPERVISOR</b>	<b>WORK</b>
<b>2007</b>	<b>1<sup>ST</sup> Prize</b>	<b>Naftali Sommer</b> Tel Aviv University	<b>Prof. Meir Feder</b>	Low density lattice code
	<b>2<sup>nd</sup> Prize</b>	<b>Hanan Weingarten</b> Technion	<b>Prof. Yossef Steinberg</b> <b>Prof. Shlomo Shamai</b>	The capacity region of the MIMO broadcast channel
	<b>2<sup>nd</sup> Prize</b>	<b>Ori Shental</b> Tel Aviv University	<b>Prof. Tony Weiss</b>	Probabilistic inference in graphical models and statistical mechanics for multiple-access communications