

## Contact

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## Top Skills

CST Microwave Studio  
XFDTD  
Antennas

## Honors-Awards

ACC - Antennas Mini Symposium  
Bronze award for HF1200 Hands-Free Imager  
CEO awards for Development & Engineering

## Patents

Antenna apparatus  
Planar antenna with elements on both sides of supporting substrate  
H-J ANTENNA  
LOADING OF A TWISTED FOLDED-MONOPOLE  
Radiator for an RF communication device

# Aviv Shachar

Antenna Division - R&D Manager at Elbit Systems Ltd  
Tel Aviv Area, Israel

## Summary

RF/Microwave/Antenna expert with 19 years experience in R&D. Innovative, creative, often as a game changer with craving for ventures

Familiar with theoretical design considerations, simulation tools and measurement techniques. Experienced in development of portable and mobile radio products, comprising multiple radio and antenna technologies inside

Leading the Advanced Technologies and responsible for researching new innovative technologies in RF/Microwave/Antenna areas for next generation products with several proven records behind. Developing new topologies of directional/sector antennas: Uniform/Beamforming arrays based reduction methods of SLL

The bulk role includes, RF considerations of receiving and transmitting links up to 6GHz, concept design based simulations, components and materials characterization, RF-layout, antenna designing, prototyping and verifying RF/antenna performance to specifications. In addition, ensuring all electromagnetic compatibility EMI/RFI and antenna performance goals are met to achieve product ship acceptance

Technical Reviewer in IEEE Transactions on Antennas & Propagation

Holds several patents in RF/Antenna areas

Technologies knowledge

LTE/GSM/UMTS/HSPA/CDMA/WCDMA iDen WiFi Bluetooth GPS/GLONASS LF-RFID HF-RFID UHF-RFID

Specific knowledge/skills

- Simulation expert in numerical Electro-Magnetic Fields such as: CST ADS HFSS MATLAB and XFDTD
- Expertise in developing Internal/External Antennas
- Expertise in considerations of propagation models
- Expertise in developing RF lineups Rx/Tx
- Extensive methods of RF measurements
- Extensive methods of antenna measurements passive and active such as:  
S-parameters, radiation patterns, Gain, EIRP, MIMO, Correlation-coefficient, Efficiency, OTA (TRP, TIS, Intermediate channels) through 2D/3D antenna-ranges
- Supporting prototype production activities with mechanical engineers and 3rd parties
- Supporting certification/regulations activities FCC/PTCRB ETSI CTIA(OTA) SAR HAC ESD

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## Experience

Elbit Systems Ltd  
Antenna Division - R&D Manager  
September 2017 - Present

RADWIN  
Director of Advanced Technologies  
October 2015 - September 2017 (2 years)  
Israel

Motorola Solutions  
Principal Staff RF/Antenna Engineer  
January 2003 - October 2015 (12 years 10 months)

Lasercomm  
Research Engineer  
January 2001 - January 2003 (2 years 1 month)

IAF 161  
IAF 161  
1993 - 1996 (4 years)

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## Education

Tel-Aviv University School of Electrical Engineering - Department of Physical Electronics

M.Sc.EEE, RF, Microwaves, Antennas · (2001 - 2005)

Tel-Aviv University School of Electrical Engineering - Department of Physical Electronics

B.Sc.EEE, RF, Microwaves, Antennas · (1998 - 2001)