

Date: 24/12/20

CURRICULUM VITAE

Personal Details

Name: **Yosef Golovachev**

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Google Scholar: <https://scholar.google.com/citations?hl=iw&user=zIM6s0oAAAAJ>

1. Academic Education

2005 - 2009 B.Sc. studies, Electrical and Electronics Engineering, Jerusalem College of Technology, Jerusalem, Israel.

2013 - 2016 M.Sc. studies, Telecommunication Systems Engineering, Jerusalem College of Technology, Jerusalem, Israel.

2017 - now Ph.D. studies, Faculty of Engineering, Dept. of Electrical and Electronics Engineering, Ariel University, Israel.
Thesis title: "Effectiveness of Millimeter Wave Communication in Different Propagation Conditions"
Supervisors: Prof. Yosef Pinhasi, Dr. Gad A. Pinhasi.

2. Academic Appointments

2011 – 2014 Assistant Teacher, Faculty of Engineering, Dept. of Electrical and Electronics Engineering, Jerusalem College of Technology, Jerusalem, Israel.

2015 – now Lecturer, researcher and Department coordinator, Faculty of Engineering, Dept. of Electrical and Electronics Engineering, Jerusalem College of Technology, Jerusalem, Israel.

3. Relevant Non-Academic Employment

2015 – 2020 Teacher and project supervisor, Practical Electronics Engineering College "Seminar Ofek", Jerusalem, Israel.

4. Awards and Honors for Academic or Professional Achievement

5. Research and Development Activities

a. Summary of Past Research and Development Activities

Development of antennas for special applications: transparent antennas, flexible and wearable antennas for military applications.

b. Summary of Current Research and Development Activities

Current research interests focused on wideband RF applications operating in the MMW and THz regimes, concentrating on the development of propagation models for different propagation conditions.

c. Future Directions for Research and Development.

6. Publications

Peer-Reviewed Papers in Refereed Journals

1. Yosef Golovachev, Ariel Etinger, Gad A. Pinhasi, and Yosef Pinhasi (2018) "Millimeter Wave High Resolution Radar Accuracy in Fog Conditions-Theory and Experimental Verification", *Sensors*, 18 (7), 2148. [[pdf](#)] (IF: 3.275, Q2, Times cited: 10)
2. Yosef Golovachev, Ariel Etinger, Gad A. Pinhasi, and Yosef Pinhasi (2019) "Propagation properties of sub-millimeter waves in foggy conditions", *Journal of Applied Physics*, 125, 151612. [[pdf](#)] (IF: 2.328, Q2, Times cited: 9)
3. Ariel Etinger, Yosef Golovachev, Gad A. Pinhasi, and Yosef Pinhasi (2019) "Dielectric Characterization of Fog in the Terahertz Regime", *Acta Physica Polonica A*, Volume 136(5), pp. 749-752. [[pdf](#)] (IF: 0.857, Q3, Times cited: 3)
4. Yosef Golovachev, Ariel Etinger, Gad A. Pinhasi, and Yosef Pinhasi (2019) "The Effect of Weather Conditions on Millimeter Wave Propagation", *International Journal of Circuits, Systems and Signal Processing*, ISSN: 1998-4464, Volume 13, pp. 690-695. [[pdf](#)] (IF: 0.857, Q4)
5. Ariel Etinger, Yosef Golovachev, Ofir Shoshanim, Gad A. Pinhasi, and Yosef Pinhasi (2020) "Experimental study of fog and suspended water effects on the 5G millimeter wave communication channel", *Electronics*, 9 (5), 720. [[pdf](#)] (IF: 2.412, Q2)
6. Benjamin Milgrom, Roy Avrahamy, Tal David, Avi Caspi, Yosef Golovachev, and Shlomo Engelberg (2020) "Extended depth of field imaging employing integrated binary phase pupil mask and principal component analysis image fusion", *OSA Open Access Publishing Agreement*, Volume 28(16), pp. 23862-23873. [[pdf](#)] (IF: 3.561, Q1)
7. Yosef Golovachev, Gad A. Pinhasi, and Yosef Pinhasi (2020) "Atmospheric Effects on OFDM Wireless Links Operating in the Millimeter Wave Regime", *Electronics*, 9 (10), 1598. [[pdf](#)] (IF: 2.412, Q2)

Peer-Reviewed Papers in Refereed Conference Proceedings (*not abstracts*)

1. Pinhasi G. and Golovachev Y. (2017) "Propagation of linear FM signals in dielectric media", *Proceedings of XVI Israeli-Russian Bi-national Workshop*, August 28 – 31, 2017, Ariel, Israel. [[IRBWS2017](#)]
2. Golovachev, Y., Etinger, A., Pinhasi, G.A. and Pinhasi, Y. (2018) "Dielectric properties of suspended water droplets and their effect on millimeter wave propagation", *Proceedings of XVII Israeli-Russian Bi-national Workshop*, August 13 – 17, 2018, Moscow, Russia. [[IRBWS2018](#)]
3. Etinger, A., Golovachev, Y., Pinhasi, G.A. and Pinhasi, Y. (2019) "Dielectric Characterization of Fog in the Terahertz Regime", *Proceedings of the 13th Symposium of Magnetic Measurements and Modeling SMMM'2018*, October 8 - 10, 2018, Cracow - Wieliczka, Poland. [[SMMM2018](#)]
4. Golovachev, Y., Mazor, A. Pinhasi, G.A. and Pinhasi, Y. (2019) "Effectiveness of Various 5G Modulation Techniques in Different Weather Conditions", *The International Conference on Microwaves, Communications, Antennas & Electronic System IEEE COMCAS 2019*, November 4-6, 2019, Tel Aviv, Israel. [[COMCAS2019](#)] – **Poster Presented**

5. Golovachev, Y., Etinger, A., Pinhasi, G.A. and Pinhasi, Y. (2019) "The Effect of Weather Conditions on Millimeter Wave Propagation", 15th International Conference on System Science and Simulation in Engineering (ICOSSSE '19), December 28-30, 2019, Athens, Greece.

7. Funded Projects, Grants or Contracts

- 2015 - 2016 Research Assistant, Jerusalem College of Technology, Jerusalem, Israel:
Prof. S. Engelberg and Dr. E. Frishman: "Image Fusion Project", MAFAT, Ministry of Defense, Israel.
- 2016 - 2019 Research Assistant, Ariel University, Israel:
Prof. Y. Pinhasi and Dr. M. Pinchas: "5th generation cellular communications", HERON consortium, Ministry of Industry and Commerce, Israel.
- 2016 - 2018 Research Assistant, Ariel University, Israel:
Prof. Y. Pinhasi, Dr. G. A. Pinhasi: "Wave propagation in the fog", MAFAT, Ministry of Defense, Israel.
- 2017 - 2018 Research Assistant, Jerusalem College of Technology, Jerusalem, Israel:
Prof. S. Engelberg and Dr. E. Frishman: "Flexible and Wearable Antenna", MAFAT, Ministry of Defense, Israel.
- 2018 - 2019 Research Assistant, Ariel University, Israel:
Prof. Y. Pinhasi, Dr. G. A. Pinhasi: "MMW propagation in rain", MAFAT, Ministry of Defense, Israel.
- 2019 - 2020 Research Assistant, Jerusalem College of Technology, Jerusalem, Israel:
Prof. S. Engelberg and Dr. E. Frishman: "Wearable antenna for special applications", MEIMAD, Israel Innovation Authority, Israel.

8. Other Relevant Academic and Professional Activities

Courses taught:

- 2015 - 2017 "130205 Analog and Digital Electronics", Jerusalem College of Technology, Jerusalem, Israel.
- 2015 - 2019 "130301 Digital Systems", Jerusalem College of Technology, Jerusalem, Israel.
- 2015 - 2020 "130502/3 Introduction to Electrical Engineering", Jerusalem College of Technology, Jerusalem, Israel.
- 2018 - 2020 "130344 Embedded Electronics Systems", Jerusalem College of Technology, Jerusalem, Israel.
- 2020 "157110 Embedded Systems Programming", Jerusalem College of Technology, Jerusalem, Israel.

Course materials development:

- 2018 "130344 Embedded Electronics Systems", Jerusalem College of Technology, Jerusalem, Israel.

2020 "157110 Embedded Systems Programming", Jerusalem College of Technology, Jerusalem, Israel.

Journal refereeing:

2020 Swati Vaid, Ashok Mittal, U.C. Ray "Estimation of IR attenuation in dust storm and its effect on the performance of FSO link", *IETE Journal of Research*.

Conference paper review:

2018 Zdunek, K. J., Wilson, A., and Passwaiter, B. "Measurements and Analysis of Aggregate Interference in Satellite-Terrestrial Spectrum Sharing", *2018 IEEE 88th Vehicular Technology Conference (VTC2018-Fall)*, August 27–30, 2018, Chicago, USA.

9. Public Service

2003 – 2006 Regular military service as a fighter in "Netzah Yehuda Battalion", IDF.