

RESUME

Barak Or

Phone: IL 0544-880143

E-mail: barakorr@gmail.com

Professional Experience

2019-today **Algorithm Engineer** at Qualcomm.

AI & DSP Algorithm Engineer. Solving classification problem in biometric detection. Development of Machine Learning, Signal Processing and Image Processing algorithms.

2018 **Algorithm Engineer** and **Project Leader** at AutoTalks Ltd.

Lead of positioning project. Developing Estimation and Navigation Algorithms. Leading field experiments and developing new solution for autonomous vehicles localization.

2017-2019 **Physics Teacher** at "The Hebrew Reali School in Haifa" (8th and 9th classes).

Education - Technion, Israel Institute of Technology

2016-2018 **M.Sc.** in Estimation and Optimal Control.

Aerospace Engineering Faculty. Supervisor: Joseph Z. Ben-Asher.

Thesis: Integrated Guidance / Estimation in Linear Quadratic Differential Games.

2012-2016 **B.Sc.** in Aerospace Engineering. Faculty of Aerospace Engineering.

2014-2016 **B.A.** in Economics and Management (Cum Laude). Faculty of Industrial Engineering.

Achievements

2018 **Gemunder Prize** for "Space-Defense Related Technologies". The prize (100,000 NIS) was given for proposal of future research: "Satellite Interception by Game Theory Approach".

2015 **Technion Competition for Security Developments - Second Place**. The prize was given for "Developing an innovative and creative idea in the field of security and dealing with terror".

Teaching and Academic Experience

2016-2019 **Teaching Assistant** at the Aerospace Engineering Faculty, I.I.T.

System Engineering (16/ 17/ 18), Navigation and Guidance (17/18), Intro. to Control (18), Intelligent Materials and Structures (17/18/19), Experimental Methods (16), and more.

2015-2017 **Project Leader**. Technion, Aerospace Engineering Faculty.

Mentoring new students. Managing 20 mentors and over 150 students during the project period

Selected Publications

- I. "Adaptive Sampling Interval for Kalman Filter-Based Tracking" Barak Or and Ben-Zion Bobrovsky. Under review. IEEE submitted, 2020.
- II. "Optimal Disturbance Attenuation Approach with Measurement Feedback to Missile Guidance" Barak Or, Joseph Z. Ben-Asher and Isaac Yaesh. IEEE, submitted 2019.
- III. "Imperfect Information Game for a Simple Pursuit-Evasion Problem" Barak Or, Joseph Z. Ben-Asher and Isaac Yaesh. EuroGNC (5th CEAS Conference on GNC) AIAA co-sponsored conference. 2019

Others

Military Service: Artillery Corps, 2007-2010. Team Commander at Operational and Training Batteries.

Computer: Python (TensorFlow, PyTorch, Pandas and more), Matlab, Linux, C, AWS, JIRA, P4V, Latex.

Languages: Hebrew- native, English- very good.