ICASSP 2024, the International Conference on Acoustics, Speech, and Signal Processing, brought together researchers, engineers, and practitioners worldwide to explore the latest advancements in these fields. Held in COEX, Seoul, South Korea, the conference featured a diverse range of sessions covering topics such as audio and speech processing, signal processing theory and methods, machine learning for signal processing, and applications in areas such as automotive radar, integrated sensing and communications, and autonomous driving in general. Attendees had the opportunity to engage in lively discussions, present their cutting-edge research, and collaborate on innovative solutions to pressing challenges in signal processing and related domains. In addition, ICASSP 2024 provided a stimulation platform for knowledge exchange and networking among experts in the academy and industry.

The conference consisted of workshops, tutorials, lecture and poster sessions, and programs. The full program schedule can be found here. On Sunday, April 14th I attended workshop WS-11: Signal Processing and Machine Learning Advances in Automotive Radar. In this workshop, where I was exposed to many new works and ideas by other research groups. On Monday, April 15th I attended workshop WS-7: Second Workshop on Signal Processing for Autonomous Systems (SPAS). In addition, I attended workshop WS-5: Workshop on Computational Imaging Using Synthetic Apertures. Both workshops revealed many interesting topics. One specific work I was inspired by was "Wideband Adaptive Beamforming for a Partially-Calibrated Distributed Array" by Anil Ganti, Michael Martinez, Granger Hickman, and Jeffery Krolik from Duke University. On Tuesday, April 16<sup>th</sup> I attended lecture session SAM-L1: Integrated Sensing and Communications. One work that I was inspired by was "Sensing-Aided Communication Channel Estimation with Tensor-Based Moving Target Localization" by Luning Lin from Zhejiang University, China, Hang Zheng from Zhejiang University, China, Sergiy A. Vorobyov from Aalto University, Finland, and Chengwei Zhou, Zhiguo Shi from Zhejiang University, China. In addition, I attended the poster session SPTM-P5: Estimation Theory and Methods. On Wednesday, April 17th Lattended ASPS-P1: ASPS Systems Poster Session. On Thursday, April 18<sup>th</sup> I attended poster sessions MLSP-22: Other Machine Learning Applications I and SAP-P3: DoA Estimation and Source Localization II. On Friday, April 19<sup>th</sup> I attended poster session SPTM-P8: Signal processing theory and methods journal papers. A specific work that inspired me was "Learning to Bound: A Generative Cramer-Rao Bound". By Hai Victor Habi, Tel Aviv University, Israel, Hagit Messer, Tel Aviv University, Israel, Yoram Bresler, University of Illinois Urbana-Champaign, USA.

I presented my work on near-field automotive SAR ("Identifiability Study of Near-Field Automotive SAR") in poster session SAM-P4: Radar Signal Processing, on Friday, April 19<sup>th</sup>. During the session, I discussed my work with many researchers in automotive radar, estimation theory, statistical signal processing, and many more. I received mostly positive comments, and I have learned what to emphasize more in my writing to attract more readers. I am very grateful for this opportunity and look forward to improving and presenting again in my PhD.

In conclusion, ICASSP 2024 was a very inspiring learning experience. I met many researchers in the field of automotive radar and many different fields of research. I've successfully presented my work via poster and learned a lot from the presentation. The insights from the conference will be used in my research and writing skills.

## **Michael Shifrin**

M.S. student in the Department of Electrical and Computers Engineering in Ben-Gurion University of the Negev.

Under the supervision of Prof. Joseph Tabrikian and Dr. Igal Bilik.

Email: shifrmi@post.bgu.ac.il.