

## SIPL Newsletter – Issue 12, May 2018

News from the Signal and Image Processing Laboratory

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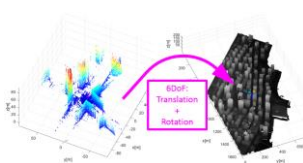
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### SIPL Activities



**SIPL annual event** will take place **Monday, July 2<sup>nd</sup>**. More details will appear [here](#) soon.



The **OMEK consortium** (under Israel Innovation Authority, Ministry of Economy) that deals with extraction of insights from 3D data is coming to its end. **SIPL** activity in OMEK, led by Prof. David Malah and Dr. Meir Bar-Zohar, with their M.Sc. student David Avidar, involves development of a set of algorithms for point cloud registration in urban outdoors environment.

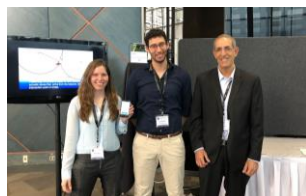


Two **new books** co-authored by Prof. Israel Cohen:

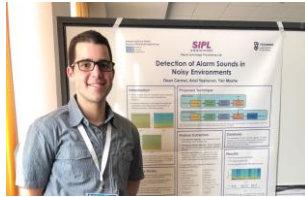
- [Fundamentals of Signal Enhancement and Array Signal Processing](#)
- [Canonical Correlation Analysis in Speech Enhancement](#)



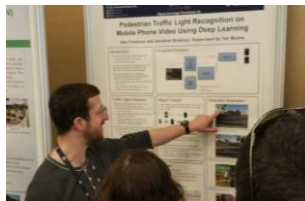
In the upcoming CVPR 2018 conference, Prof. Tomer Michaeli's team is going to present 5 papers. You can find these papers [here](#).



Two **SIPL** students have presented a demo of **acoustic positioning with unsynchronized sound sources** at ICASSP 2018.



Two *SIPL* students have presented a poster of their paper on **detection of alarm sounds in noisy environments** at EUSIPCO 2017.



Two *SIPL* students have presented a poster of their project on **pedestrian traffic light recognition** at IMVC 2018.



Yair Moshe has presented **deep learning techniques** that *SIPL* students are developing to **help people with disabilities** at Systematics deep learning seminar 2018.



**Project in the spotlight:** Two *SIPL* students have developed, in collaboration with their supervisor and with Prof. Ran El-Yaniv, an algorithm that **creates jazz improvisations using an RNN** (recurrent neural network) composed of LSTM (long short-term memory) units based on a dataset of improvisations by some of the greatest jazz improvisers. More information can be found [here](#).

## *SIPL* Alumni



**Prof. Guillermo Sapiro** from Duke University was recently elected as a fellow of the American Academy of Arts and Sciences. He is a graduate of our department, who gained his M.Sc. under the supervision of Prof. David Malah (1991) and his Ph.D. under the supervision of Prof. Allen Tannenbaum and Prof. Freddy Bruckstein (1993). During his studies, he has supervised undergraduate projects in *SIPL* and he is in close contact with *SIPL* since. As a Ph.D. student, he was a co-founder of the Pixel Club. He worked at the University of Minnesota for 15 years and also worked at HP Labs. Guillermo is well known for his significant contributions to the fields of image processing, computer vision, computer graphics, and machine learning, such as techniques for segmentation using active contours, image inpainting, and the LOCO-I lossless image

compression algorithm. Guillermo has won many awards over the years.

SIPL recent industry collaborators



Comments and suggestions: [sipl-newsletter@ee.technion.ac.il](mailto:sipl-newsletter@ee.technion.ac.il)