



MEET OUR AMBASSADORS



Itzik Klein

Assistant Professor

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Field of Research:

Intersection of artificial intelligence, navigation, and sensor fusion. [Link](#) to Lab.

SHORT BIO

I received the B.Sc. and M.Sc. degrees in Aerospace Engineering from the Technion - Israel Institute of Technology, in 2004 and 2007, respectively. I hold a Ph.D. degree in Geo-information Engineering from the Technion - Israel Institute of Technology which I received in 2011. I am currently an Assistant Professor, heading the **Autonomous Navigation and Sensor Fusion Lab**, at the Hatter Department of Marine Technologies. Prior to joining the University of Haifa, I worked at leading companies in Israel for than 15 years on navigation issues. I am an IEEE Senior Member and a member of the IEEE journal of Indoor and Seamless Positioning and Navigation (J-ISPIN) Editorial Board. I supervise 22 graduate students (12 Ph.D.) researching at the intersection of artificial intelligence, navigation, and sensor fusion aiming to create value and opportunities for ocean and environment protection, identifying illnesses and wellbeing in humans and animals, and developing tools for autonomous vehicles teamwork.

FUNDRAISING NEEDS

Unlocking the potential of AI navigation for marine ecology protection.

The world's oceans are under threat from carbon dioxide emissions and plastics pollution, to overfishing and the destruction of coral reefs, human activities are damaging the marine ecosystems. To counter these threats we need to invest in ocean exploration.

My lab is at the forefront of the critically important field of underwater navigation and precise data collection. We seek support to advance our innovative research in the fields of autonomous navigation, data-driven based navigation, inertial navigation systems, and estimation theory for different types of platforms such as robots, drones and underwater vehicles.

The lab requires **two portable AUVs** equipped with unique, modular sensor suites. Deploying two lightweight AUVs, that are able to exchange information, will allow us to accelerate our applied research agenda, improve our navigation algorithms, expedite the development of innovative commercial products and services and create value and opportunities for ocean ecology protection.