Dr. Ohad Zivan

Professional experience:

07/2024 – now	Junior Assistant professor (RTDa), fixed term for 3 years, in Department of Medical and Surgical Sciences at Univrsity of Bologna, Bologna, Italy. Part of the Dare project, working at and leading Task 3.4: Use large-scale cohort studies to identify lifetime, environmental and occupational determinants of healthy ageing. Includes developing advanced AI/ML models.
05/2024 – 07/2024	Freelancer scientist for Meneswa SRL – working on several projects, using data analysis to explore air pollution exposure.
03/2024 – 04/2024	Scientist in deepplants srl in Roma.
05/2023 – 07/2024	Freelancer meteorologist for Ricult inc. – analyzing forecast and historical data to provide better understanding for sugarcane farmers.
12/2022 – 10/2023	Freelancer scientist for Meneswa SRL– working on exposure assessment. the project scope is to understand the air pollution exposure of a steel mill in southern Italy. working with large datasets, polygons, and spatial analysis.
05/2022 – 09/2022	Lead Data Scientist for Terroir from Space (https://terroirfromspace.com/). Leveraged satellite data to understand the climate variables needed for vineyards. Used advanced statistical methods and modern indices to better understand the environmental conditions.
01/2019 – 08/2021	Post-doc position in Unimore university. Modena, Italy. Part of the TRAFAIR project. Responsible for the low-cost sensors in three cities. This includes deployment (in Modena only), machine learning analysis, calibration, visualizations (including time series) and instruction of other partners on the low-cost sensors in their possession. Running and preparing a guide for GRAL a transport air pollution model. My suggestion on how to parallel compute GRAL was adopted and utilized.
01/2017 – 12/2018	Consultant to the Israel Laboratory Accreditation Authority (ILAA) on air pollution and chemistry regulations and Accreditation. Understanding of regulation and quality assurance of air pollution measurements.
01/2017 – 12/2018	Research associate for the TCEEH at the Technion – Operated several air pollution technologies (OPCs, MA200-BC, Nanoaerosols, etc). Analyzed the data obtained for long periods of time (at least a year) using various advanced statistical techniques. Weather analysis and air pollution modeling work to better understand local trends.
10/2016 – 12/2016	Post-Doc at the T-Sail lab
11/2011 – 09/2015	Head Teaching Assisting in "Introduction to numerical analysis". Entails supervising four additional teaching assisting for a 300 student's course. Including creating lesson plans and organize schedules, as well as pursuing feedback about the students progressions.

10/2009 – 07/2016	TA in the following courses: "Introduction to environmental engineering", "Hydraulic engineering", "Introduction to meteorology", Introduction to numerical analysis" (both in Hebrew and English for international students), "Chemistry of the environment" (an advancement graduate course).

volunteer experience:

11/2022 – now	volunteering remotely in climatematch.io. led the communications department, work on course curriculum, and python tutorial.
10/2022 – 09/2023	volunteering remotely in CodeforIsrael. working on agricultural data science aspect of the product

Education:

2012 – 2016	Ph.D. in environmental engineering at the Technion – Israel Institute of Technology Title: "**A study of primary and Secondary pesticide drift from an Orchard**" Supervisors: Prof Yael Dubowski and Dr. Yardena Raviv . *Experienced in air pollution modelling, including CALPUFF and CALMET (self-taught all models) software and Matlab air pollution modelling. Understanding of canopy flows and dynamic aerosol behavior.*
May 2015	Course in Helsinki University, Finalnd: "11th Summer School on Atmospheric Aerosol Physics, Measurement, and Sampling" by Prof. Kaarle Hämeri, Prof. Alfred Wiedensohler and Dr. Jean-Philippe Putaud.
2009 – 2012	M.Sc. (with thesis) in environmental engineering at the Technion – Israel Institute of Technology Title: "**Atmospheric levels and transport of organophosphates pesticides and their derivatives at agricultural settlements**" Supervisors: Prof Yael Dubowski *Experienced with photo-oxidation surface reactions, and lab procedures for pesticide extractions and quantification. This work aimed to assess the epidemiological effect of long term exposure to organophosphates pesticides.*
2005 - 2009	Studying towards a B.Sc. degree in Environmental Engineering at the Technion – Israel Institute of Technology.

Publications:

Zivan, O., Segal-Rosenheimer, M., Dubowski, Y., 2016. Airborne organophosphate pesticides drift in Mediterranean climate: The importance of secondary drift. Atmos. Environ. 127, 155–162. doi:10.1016/j.atmosenv.2015.12.003

Lester, Y., Sabach, S., **Zivan, O**., Dubowski, Y., 2016. "Key environmental processes affecting the fate of the insecticide chloropyrifos applied to leaves". Chemosphere. doi:10.1016/j.chemosphere.2016.12.013

Zivan, O., Bohbot-Raviv, Y., Dubowski, Y., 2017. Primary and secondary pesticide drift profiles from a peach orchard. Chemosphere 177, 303–310. doi:10.1016/j.chemosphere.2017.03.014

Shafran-Nathan, R., Etzion, Y., **Zivan, O**. and Broday, D. M.: Estimating the spatial variability of fine particles at the neighborhood scale using a distributed network of particle sensors, Atmos. Environ., 218, 117011. doi:10.1016/j.atmosenv.2019.117011

Yuval, Magen Molho, H., **Zivan, O**., Broday, D. M. and Raz, R.: Application of a sensor network of low cost optical particle counters for assessing the impact of quarry emissions on its vicinity, Atmos. Environ., 211, 29–37, doi:10.1016/j.atmosenv.2019.04.054

Baruah A, **Zivan O**, Bigi A and Ghermandi G: Evaluation of low-cost gas sensors to quantify intra-urban variability of atmospheric pollutants. Environmental Science: Atmospheres, **https://doi.org/10.1039/D2EA00165A**

Conference lectures:

08.2013 "Atmospheric measurements and modeling of pesticides drift to communities adjacent to agricultural fields" at the 2013 ISEE 25th convention in Basel, Switzerland.
10.2012 "Atmospheric measurements and modeling of organophosphate pesticides drift to settlements near agricultural fields" at the 2012 ISEES 40th convention in Tel Aviv, Israel.
06.2011 "Chlorpyrifos degradation Rates from direct Photochemistry" at the 2011 ISEES 39th convention in Megiddo Regional Council, Israel.

Personal information:

Name:	Ohad Zivan.
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Research gate:	https://www.researchgate.net/profile/Ohad_Zivan
LinkedIn:	https://www.linkedin.com/in/ohad-zivan-0936661a/

Languages:

Fluent in English and Hebrew. Basic Italian.

Awards:

2015	"Vivian Konigsberg Award for Excellence in Teaching" for the spring semester 2014-2015.
2014	"Complete Organism scholarship" governmental award for an excellent PhD research in an agricultural theme
2012	"Complete Organism scholarship" governmental award for an excellent MSc research in an agricultural theme