Uri Wollner

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SUMMARY OF QUALIFICATIONS

- 5 years of research experience, including programming (C++, MATLAB, R, and JAVA) as well as performing statistical analysis (goodness of fit, ANOVA, hypothesis testing) and applying prediction-based methods (supervised and unsupervised learning).
- Advanced theoretical and practical knowledge on elastic, electrical, and transport properties of porous media.

EDUCATION

Stanford University, Stanford, CA   09/2014–04/2018
- Ph.D. Major: Geophysics, Minor: Statistics, GPA 3.85/4.0

Tel Aviv University, Tel Aviv, Israel   09/2010–09/2013
- B.Sc.: Geophysics, GPA 88/100.

RELEVANT EXPERIENCE

Research Assistant, Stanford University, Stanford, CA   09/2014–04/2018
- Developed and implemented theoretical rock physics models combined with statistical methods in order to allow interpretation and prediction of gas, oil, and water saturated rock properties from recorded seismic data.
- Efficiently handle large data (~ 2 TB) using self-written programs for statistical analysis.
- Utilized principal components, regression, Bayesian statistics and other statistical techniques to develop a prediction algorithm for the interpretation process of petrophysical, transport, and elastic properties of porous media and optimize its performance.
- Collaborated and provided technical resources, solutions, and risk analysis to third-party contractors that wished to estimate locations of subsurface gas and oil reservoirs using seismic data.
- Taught lessons, as part of a teaching assistant position, on utilization of MATLAB as a tool for research and technical computing. Course No. GEOPHYS 112.
- Performed lab measurements of electric, elastic, and transport properties of porous media.

Research Assistant, Weizmann Institute, Rehovot, Israel   10/2012-10/2014
- Proposed and implemented physics-based methods for acquiring cloud's properties based on the relations between light scattering and distribution of cloud droplets at clouds' tops.
- Utilized bootstrap and variance analysis to quantify variability of interpreted cloud properties.

LEADERSHIP EXPERIENCE

First Sergeant Israel Defense Force, Israel   04/2005-04/2008
- Supervised a group of 20 recruits in performing daily missions. Included briefings, preparing and operating relevant equipment, and making decision under pressure.
- Trained, motivated, and conducted technical and physical performance evaluations.

TECHNICAL COMMUNICATION

- **Wollner, U.** and J. Dvorkin, 2017, Elastic Mineral Facies: Selecting site-specific elastic moduli of clay, Geophysics.
- **Wollner, U.**, Y. Yang, and J. Dvorkin, 2017, Rock physics diagnostics of an offshore gas field, Geophysics.
- Dvorkin, J., and **U. Wollner**, 2017, Rock physics transforms and scale of investigation, Geophysics, 82(3), MR75-MR88.
- **Wollner, U.** and G. Mavko, 2017, Brown and Korringa constants for heterogeneous thinly layered poroelastic media, Journal of Geophysical Research, doi: 10.1002/2016JB013672.
- **Wollner, U.** and J. Dvorkin, 2016, Effective fluid and grain bulk moduli for heterogeneous thinly layered poroelastic media, Geophysics, 81(6), D573-D584.
- **Wollner, U.**, I. Koren, O. Altaratz, and L. A. Remer, 2104, On the signature of the cirrus twilight zone, Environmental Research Letters, 9, 094010.
- Altaratz, O., R. Z. Bar-Or, **U. Wollner**, and I. Koren, 2013, Relative humidity and its effect on aerosol optical depth in the vicinity of convective clouds, Environmental Research Letters, 8(3), 034025.

AWARDS & SCHOLARSHIPS

- SEG/David R. Lammlein Scholarship, 2016, awarded to 1 applicant out of 655.
- SEG/Chevron Scholarship, 2016, awarded to 24 applicants out of 655.
- Distinguished Soldier Award, Israel Defense Force, 2007.

SKILLS

- **Statistic** – Linear regression, Categorical analysis, Stochastic processes, LDA, QDA, Random Forests, and other machine learning (supervised and unsupervised learning) methods.
- **Programming** – R, C/C++, Matlab, Shell, Fortran, JAVA.
- **Software** – SPSS, COMOSL, Microsoft Office Suit, PetroMod, Jason Workbench, LATEX.
- **Operating Systems** – Windows OS, Mac OS X, Linux.
- **Languages** – Hebrew (native), English (fluent), Croatian (proficient).