Ali Siahkoohi
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Education

Georgia Institute of Technology — Atlanta, GA, USA
Doctor of Philosophy in Computational Science and Engineering; — *Sep. 2016 – Aug. 2021* (expected)
Advisor: Felix J. Herrmann – GPA: 4.00/4.00 (Up to now)

University of Tehran — Tehran, Iran
Master of Science in Geophysics; — *Sep. 2013 – Mar. 2016*
Advisor: Ali Gholami – GPA: 3.88/4.00 (Ranked 1st)

Sharif University of Technology — Tehran, Iran
Bachelor of Science in Electrical Engineering; — *Sep. 2008 – Aug. 2013*
GPA: 3.77/4.00 (Related courses)

Research Interests

Deap Learning, Signal Processing, Imaging, Inverse Problems, Numerical Linear Algebra, Optimization

Programming Skills

Languages: Python, C, Julia, MATLAB
Machine Learning Library: TensorFlow
Technology: AWS
Standard: MPI
Version Control System: Git, SVN
Document Preparation System: LaTeX, Markdown

Teaching Experience

Georgia Institute of Technology — Atlanta, GA, USA
Teaching Assistant for Numerical Analysis I, Fall 2018

Sharif University of Technology — Tehran, Iran
Teaching Assistant for Signals and Systems, Spring 2011
Teaching Assistant for Digital Signal Processing, Spring 2011
Teaching Assistant for Linear Algebra, Fall 2010
Laboratory Assistant for Principles of Electrical Engineering, Fall 2010

Publications

[1] Gabrio Rizzuti, Ali Siahkoohi, and Felix J. Herrmann. "Learned iterative solvers for the Helmholtz equation". Submitted to EAGE on January 15, 2019.

[2] Felix J. Herrmann, Gerard J. Gorman, Jan Hückelheim, et al. "The power of abstraction in Computational Exploration Seismology". In: *Smoky Mountains Computational Sciences and Engineering Conference*. Aug. 2018.

[3] Ali Siahkoohi, Mathias Louboutin, Rajiv Kumar, et al. "Deep-convolutional neural networks in prestack seismic: Two exploratory examples". In: *SEG Technical Program Expanded Abstracts 2018*. Oct. 2018, pp. 2196–2200. DOI: 10.1190/segam2018-2998599.1.

[4] A. Siahkoohi, R. Kumar, and F. Herrmann. "Seismic Data Reconstruction with Generative Adversarial Networks". In: *80th EAGE Conference and Exhibition 2018*. June 2018. DOI: 10.3997/2214-4609.201801393.

[5] A. Siahkoohi and A. Gholami. "Sparsity Promoting Least Squares Migration for Laterally Inhomogeneous Media". In: *7th EAGE Saint Petersburg International Conference and Exhibition*. Apr. 2016. DOI: 10.3997/2214-4609.201600223.

[6] Mohmmad Sadegh Ebrahimi, Mohammad Hossein Daraei, Jamshid Rezaei, et al. "A Novel Utilization of Wireless Sensor Networks as Data Acquisition System in Smart Grids". In: *Materials Science and Information Technology*. Vol. 433. Advanced Materials Research. Trans Tech Publications, Jan. 2012, pp. 6725–6730. DOI: 10.4028/www.scientific.net/AMR.433-440.6725.

[7] Amir Najafi, Ali Siahkoohi, and Mohammad B Shamsollahi. "A content-based digital image watermarking algorithm robust against JPEG compression". In: *2011 IEEE International Symposium on Signal Processing and Information Technology (ISSPIT)*. IEEE. Feb. 2011, pp. 432–437. DOI: 10.1109/ISSPIT.2011.6151601.