

ORHAN OCAL

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EDUCATION

University of California at Berkeley USA • Electrical Engineering and Computer Sciences PhD program, 2014-present • Cumulative GPA: 4.00/4.00

École Polytechnique Fédérale de Lausanne Lausanne, Switzerland • Communication Systems MSc, 2012-2014 • Cumulative GPA: 5.96/6.00

Bogazici University Istanbul, Turkey • Electrical and Electronics Engineering, 2009-2012 • Cumulative GPA: 3.98/4.00, Dean's High Honor List

Istanbul Technical University Istanbul, Turkey • Electronics Engineering, 2008-2009 • Cumulative GPA: 3.94/4.00, Dean's High Honor List

American Robert College High School Istanbul, Turkey • Science Program, 2003-2008 • High Honors

EXPERIENCE

University of California at Berkeley

Research assistant

(August 2014 - present, Berkeley, USA)

- Working on applications of sparse-graph codes for sampling and recovering sparse signals with minimum sample and computational complexity

IBM Research – Zurich

Master's thesis intern

(February 2014 - August 2014, Rüschlikon/Switzerland)

- Worked on novel beamforming methods for radio astronomy to improve the performance of sparse signal reconstruction methods for imaging

École Polytechnique Fédérale de Lausanne

Research Assistant

(September 2012 - August 2014, Lausanne/Switzerland)

- Worked as research assistant in Audiovisual Communications Laboratory on indoor localization and compressed sensing

SELECTED COURSEWORK AND SKILLS

- Selected Coursework: 'Designing, Visualizing and Understanding Deep Neural Networks', 'Convex Optimization and Approximation', 'Stochastic Systems: Estimation and Control', 'Error Control Coding'
- Programming Languages and Libraries: Python, Tensorflow, C/C++, Java, MATLAB

HONORS AND AWARDS

- Graduated from École Polytechnique Fédérale de Lausanne with first rank among all MSc programs.
- Research Scholars MSc Program, School of Computer and Communication Sciences, EPFL, 2012, 2013.
- Graduated from Bogazici University with 1st degree in Electrical and Electronics Engineering Department and 2nd degree in School of Engineering, 2012.
- Dean's High Honor List, Bogazici University School of Engineering, 2010, 2011, 2012.
- MIT Enterprise Forum Turkey Business Plan Competition within 31 semifinalist from 3,200 applications, 2011.
- Siemens Scholarship, 2011, 2012.
- NETAŞ Telecommunications Scholarship, 2011, 2012.

PUBLICATIONS

- O. Ocal, X. Li, and K. Ramchandran, "A sparse-graph-coded filter bank approach to minimum-rate spectrum-blind sampling," in *Proc. IEEE Int. Conf. Acoust., Speech, and Signal Proc.*, Shanghai, 2016.
- O. Ocal, P. Hurley, G. Cherubini and S. Kazemi, "Collaborative randomized beamforming for phased array radio interferometers," in *Proc. IEEE Int. Conf. Acoust., Speech, and Signal Proc.*, Brisbane, 2015, pp. 5654-5658.
- O. Ocal, I. Dokmanic, and M. Vetterli, "Source Localization and Tracking in non-convex rooms," in *Proc. IEEE Int. Conf. Acoust., Speech, and Signal Proc.*, Florence, 2014, pp. 1429-1433.
- O. Ocal, I. Dokmanic, and M. Vetterli, "Method and a system for determining the location of an object," US Patent App. 14/575,912, 2014
- N. Freris, O. Ocal, and M. Vetterli, "Method for compressed sensing of streaming data and apparatus for performing the same", US Patent App. 14/481,581, 2014
- N. Freris, O. Ocal, and M. Vetterli, "Compressed sensing of streaming data," in *Proc. Allerton Conf. on Comm., Control, and Computing, Monticello, 2013*, pp. 1242-1249.