

CONTACT INFORMATION	1117 1/2 E College St Iowa City, IA. 52240. USA.	+1 319-400-8488 gregory-ongie@uiowa.edu
RESEARCH INTERESTS	Novel reconstruction methods for magnetic resonance imaging, compressed sensing.	
EDUCATION	University of Iowa , Iowa City, IA Ph.D., Applied Mathematical and Computational Sciences, <i>Expected: May 2016</i> <ul style="list-style-type: none"> • Thesis Topic: <i>Recovery of Multidimensional Piecewise Polynomial Signals: Discrete and Continuous Methods</i> • Advisor: Mathews Jacob, Ph.D M.S., Mathematics, Aug 2011 Coe College , Cedar Rapids, IA B.S., Mathematics and Physics, May 2008	
RESEARCH EXPERIENCE	Research Assistant Department of Electrical and Computer Engineering, University of Iowa Supervisor: Mathews Jacob, Ph.D	Jan 2013 to present
TEACHING EXPERIENCE	Research Experience for Undergraduates (REU) Mentor University of Iowa Supervisor: Palle Jorgensen, PhD. <ul style="list-style-type: none"> • Led a group of four upper-level undergraduate students on an image processing research project Teaching Assistant Multivariable Calculus for Engineers Calculus I & II Calculus I for Biology Students	June-Aug 2011 Aug 2010–Dec 2013
SERVICE	Heartland Talks Liaison <ul style="list-style-type: none"> • Coordinated student talks at nearby universities. Graduate and Undergraduate Student Seminar Co-chair <ul style="list-style-type: none"> • Organized a student-run seminar to engage undergraduates in advanced mathematics. 	Oct 2011 – Feb 2012 Jan 2011 – Dec 2011
REFERENCES	Mathews Jacob Associate Professor Department of Electrical and Computer Engineering University of Iowa Phone: +1 319-335-6420 E-mail: mathews-jacob@uiowa.edu Rachel Ward Assistant Professor Department of Mathematics University of Texas at Austin Phone: +1 512-471-0144 E-mail: rward@math.utexas.edu Ivan Selesnick Professor Department of Electrical and Computer Engineering NYU Polytechnic School of Engineering Phone: +1 718-260-3416 E-mail: selesi@nyu.edu	

Track Record

(Top three selected publications in blue)

PENDING JOURNAL PUBLICATIONS

G. Ongie and M. Jacob. “Off-the-grid Recovery of Piecewise Constant Images from Few Fourier Samples.” Accepted to *SIAM Journal of Imaging Sciences*. 2016.

REFEREED JOURNAL PUBLICATIONS

1. **G. Ongie** and M. Jacob. “Recovery of Discontinuous Signals Using Group Sparse Higher Degree Total Variation.” *Signal Processing Letters*, 22(9), 1414-1418. 2015.
2. Y. Moshin, **G. Ongie**, and M. Jacob, “Iterative Shrinkage Algorithm for Patch Smoothness Regularized Medical Image Recovery.” *IEEE Transactions on Medical Imaging*. 2015.
3. **G. Ongie***, Y. Hu*, S. Ramani, M. Jacob. “Generalized Higher Degree Total Variation.” *IEEE Transactions on Image Processing*, 23(6), 2423-2435. 2014. (*equal authorship)

CONFERENCE PUBLICATIONS

1. **G. Ongie** and M. Jacob. “A Fast Algorithm for Structured Low-Rank Matrix Recovery with Applications to Undersampled MRI Recovery.” *International Symposium on Biomedical Imaging (ISBI)*. Prague, Czech Republic. 2016.
2. **G. Ongie** and M. Jacob. “Recovery of Piecewise Smooth Images from Few Fourier Samples.” *Sampling Theory and Applications (SampTA)*. Washington, D.C. 2015.
3. **G. Ongie** and M. Jacob. “Super-resolution MRI Using Finite Rate of Innovation Curves.” *International Symposium on Biomedical Imaging (ISBI)*. Brooklyn, NY. (Best student paper award winner)
4. **G. Ongie**, Y. Hu, M. Jacob. “Higher Degree Total Variation for 3-D Image Recovery.” *International Symposium on Biomedical Imaging (ISBI)*. Beijing, China. 2014.
5. Y. Moshin, **G. Ongie**, M. Jacob. Accelerated MRI Using Iterative Non-local Shrinkage. *Annual Conference of the Engineering in Medicine and Biology Society (EMBC)*. Chicago, IL. 2014.

PRESENTATIONS

Invited Talks

- “Off-the-grid Compressive Imaging,” ICES Seminar, U. Texas–Austin March 2016

Conference Talks

- International Symposium on Biomedical Imaging (ISBI). Prague, Czech Republic. April 2016
- Sampling Theory and Applications (SampTA), Washington, D.C. May 2015
- International Symposium on Biomedical Imaging (ISBI). Brooklyn, NY. May 2015
- International Symposium on Biomedical Imaging (ISBI). Beijing, China. May 2014

Poster Presentations

- IMA Workshop on Optimization and Parsimonious Modeling. University of Minnesota. Jan 2016
- Co-Prime Sensing Basic Research Challenge Program Review. George Mason University, Fairfax, Virginia. May 2015

Public Outreach Talks

- Lindsay Seminar. Coe College, Cedar Rapids, IA. May 2012 & 2013.

EDITORIAL
ACTIVITIES

Ad-hoc reviewer for:

- Transactions on Medical Imaging, IEEE
- Signal Processing Letters, IEEE
- Information Processing Letters, Elsevier
- PLOS ONE
- Conference Proceedings of the International Symposium on Biomedical Imaging, 2015 & 2016.

AWARDS

Conference Awards

- Best Student Paper Award. IEEE/EMBS International Symposium on Biomedical Imaging, New York. May 2015.

Student Awards

- Presidential Fellowship, University of Iowa. 2008–2013
 - Five year fellowship, including three full years of financial support.
- Phi Beta Kappa Membership. Coe College. 2008.