

Michael T. McCann

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Current position

Carnegie Mellon University, Pittsburgh, Pennsylvania (Fall 2010 - present)
PhD candidate in Jelena Kovačević's lab.

Education

University of Michigan, Ann Arbor (Fall 2006 - Spring 2010)
Major: Biomedical Engineering, Minor: Computer Science Engineering.

Reviewed journal publications

- M. T. McCann, D. G. Mixon, M. C. Fickus, C. A. Castro, J. A. Ozolek, and J. Kovacevic, "Images as occlusions of textures: A framework for segmentation," *IEEE Trans. Image Process.*, vol. 23, no. 5, pp. 2033–2046, May 2014.
- M. T. McCann, D. E. Thompson, Z. H. Syed, and J. E. Huggins, "Electrode subset selection methods for an EEG-based P300 brain-computer interface," *Disabil Rehabil Assist Technol*, Feb. 2014.

Reviewed conference publications

- M. T. McCann, R. Bhagavatula, M. C. Fickus, J. A. Ozolek, and J. Kovačević, "Automated colitis detection from endoscopic biopsies as a tissue screening tool in diagnostic pathology," in *Proc. IEEE Int. Conf. Image Process.*, Orlando, FL, Sep. 2012, pp. 2809–2812.
- F. Cerda, J. Garrett, J. Bielak, P. Rizzo, J. A. Barrera, Z. Zhang, S. Chen, M. T. McCann, and J. Kovačević, "Indirect structural health monitoring in bridges: scale experiments," in *Proc. Int. Conf. Bridge Maint., Safety Manag.*, Lago di Como, Jul. 2012, pp. 346–353.

Presentations and posters

- M. T. McCann, R. Bhagavatula, M. C. Fickus, J. A. Ozolek, and J. Kovačević, "Towards automated detection of active colitis in images of H&E-stained tissue samples," in *SPIE Computational Imaging X*, San Francisco, CA, Jan. 2012, talk.
- D. E. Thompson, M. T. McCann, C. C. Lee, and J. E. Huggins, "Impact of wheelchair tilt on P300 brain-computer interface accuracy," in *Neuroscience*, San Diego, CA, Nov. 2010, abstract.
- M. T. McCann, D. E. Thompson, and J. E. Huggins, "A brute force investigation of electrode subsets for a P300 BCI," in *BCI Meeting*, Asilomar, CA, May 2010, poster.
- D. E. Thompson, M. T. McCann, and J. E. Huggins, "Controlling wheelchair tilt with a brain-computer interface," in *BCI Meeting*, Asilomar, CA, May 2010, poster.

Advising

J. Majumdar (MS) - Directed Research (Spring 2013 - Spring 2014)
Digital stain separation for automated histology

C. Peng (MS) - Directed Research (Fall 2011 - Fall 2012)
Digital stain separation for automated histology

S. Chen (MS) - Directed Research (Fall 2011 - Spring 2012)
Indirect bridge structural health monitoring

A. Menon (MS) - Directed Research (Spring 2011)
Tree-structured classifiers for automated histology

L. Yingling (Undergraduate) - Independent Study (Summer 2011 - Spring 2013)

Teaching

Intro to Biomedical Signal Processing (Spring 2011, Spring 2012, Spring 2013)

I was a teacher's assistant for this graduate/advanced undergraduate course three times. I designed and graded homeworks and exams, held regular office hours, give an exam reviews, guided student projects, and gave lectures: "Introductory MATLAB," "Linear Algebra Basics," and "Introduction to Machine Learning via Puzzles."

MATLAB Minicourse (Fall 2010)

I created weekly lectures and examples to help three undergraduate students improve their understanding of MATLAB.

Service

Reviewer for ICASSP (2013-2014)

Reviewer for ISBI (2012-2014)

Reviewer for ICIP (2012-2014)

Fellowships and awards

Presenter at the Carnegie Mellon University Inauguration of Dr. Subra Suresh Celebration (2013)

John and Claire Bertucci Fellowship (2013-2014)

NSF GRFP Fellowship (2011-2014)

Achievement Rewards for College Scientists (ARCS) Foundation Scholarship (2010-2013)

Carnegie Mellon University Biomedical Engineering Graduate Teaching Award (2012)