

CYRUS OMAR

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Education

Carnegie Mellon University
Center for the Neural Basis of Cognition
PhD, Neural Computation (in progress)

University of Illinois at Urbana-Champaign (May 2008)
B.S., Computer Science, *summa cum laude*
B.S., Molecular & Cellular Biology, *summa cum laude*

Research Interests

- Theoretical analysis of cortical circuitry, neural covariability, synaptic plasticity, statistical models of perception, simulation techniques

Refereed Publications

T. Achler, C. Omar, E. Amir, *Shedding the weights: more with less*. 2008 International Joint Conference on Neural Networks (IJCNN).

C. Omar, M. Johnson, T. W. Bretl, T. P. Coleman, *Policies for neural prosthetic control: initial experiments with a text interface*. 2008 American Control Conference (ACC).

Invited Talks

C. Omar, M. Johnson, T. W. Bretl, T. P. Coleman*, *Querying the user properly for high-performance brain-machine interfaces: recursive estimation, control, and feedback information-theoretic perspectives*, Invited Session on "Revamping Signal Processing for Neuroscience: Challenges in Brain Machine Interface Technology", 2008 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP).

C. Omar, M. Johnson, T. W. Bretl, and T. P. Coleman*, *Using feedback information theory for closed-loop neural control in brain-machine interfaces*, invited talk, special session on "Methods of Information Theory in Computational Neuroscience", Seventeenth Annual Computational Neuroscience Meeting (CNS), July 2008.

Honors

- DOE Computational Science Graduate Fellowship (2008)
- NSF Graduate Research Fellowship (2008)
- Duncan H. Lawrie Leadership Award (2008)
- UIUC Bronze Tablet Award (2008)
- Member, Phi Beta Kappa (2008)
- Member, Tau Beta Pi (2007)
- Jeffrey P. Blahut Scholarship (2007)
- Judge's Prize, Computing Habitat Competition (2007)
- Franz Hohn and J. P. Nash Scholarship for scientific computing (2006)