

Mustafa Sinan Cetin, PhD

Qualifications: More than 10 years of experience implementing and adapting technically sophisticated data mining, machine learning, big data algorithms with Python, C++ and Matlab and expertise in neuroimaging, NLP data domain. Known for excellent troubleshooting skills – able to analyze code and engineer well-researched, cost-effective and responsive solutions.

Education:

- PhD in Computer Science Department**, University of New Mexico May - 2015
Dissertation: New Approaches for Data-mining and Classification of Mental Disorder in Brain Imaging Data
- M.S. in Informatics Department**, Istanbul University June - 2007
Thesis: Design and Implementation of the Checkout and Return Units in the Library Information System
- B.Sc. in Department of Computer and Control Technology**, Marmara University June - 2004
Thesis: Structuring DSI Yesil Cay Cathodic Remote Control System.

Skills:

- Prog. Lang.** : Python, C++, VC++, C#, VB.NET, VB6, Matlab, HTML, XML, Visual Studio.NET, bash scripting and Haskell
- Database** : MySQL, MsSQL, Hadoop, Spark, HDFS
- Other** : Technical analysis, technical leadership, troubleshooting and technical documentation, OOP modelling.

Professional Experience:

- Data Scientist**, Intel Oct, 15 – Present
- Member of New Business Initiative Group. My work is related to machine learning, statistical data analysis, predictive analytic and recommender engines.
- Data Scientist**, Consultant, Datalytic Solutions, Albuquerque, NM July, 15, - Oct, 15
- Developing data-mining, machine-learning algorithms for major telecom companies by using big-data methods and solutions.
- Post-Doctoral Research Fellow**, The Mind Research Network May, 15 - Oct, 15
- My research interests are developing data-mining, machine-learning and big-data methods, analysis and classification of large, multi-dimensional data sets.
- Research Assistant**, Computer Science Department, Albuquerque, NM Aug , 09- May, 15
- I studied the development and application of big data, image processing, clustering, dynamic multivariate pattern classification, data-mining and machine-learning methods to advance the understanding of how the human brain is functioning and how it is effected by different brain conditions.
- Software & Control Engineer**, Novelics LLC, Intern / Aliso Viejo, CA Apr, 08-Feb, 09
- Software and QA engineer for developed applications to automate data collection from various microchips, prepare reports, plotting and analysis in real-time. The improved application increased the productivity of the testing process significantly and reduced QA cost.
- Project Manager & Software Engineer**, Yordam Software, Istanbul/Turkey Sep, 03-Jan, 07
- Project manager for designing Library Check in/out Machines and integrating it into library automation systems.
 - Software engineer and project manager for “Yordam E-Mustensih Program” that digitalized more than 25 million handwritten books in the first year and was rewarded by Ministry of Culture.

Awards and Honors

- Travel Award for SDM 2015 conference.
- First year of scholarship, *University of New Mexico, 2009-10*
- Istanbul Metropolitan Municipality, *2001-04*
- 21st Century foundation scholarship, *Marmara University, 1999-04*
- Turkish Government Scholarship, *Marmara University, 1999-04*

Leadership

- President of Turkish Students’ Association at UNM, *2009-2015*.
- Co-founder, member and secretary of Governor Council of Albuquerque School of Excellence, *2010-Current*.
- Vice-President Department of Computer and Control Technology club, *2003-04*.

Publication List

- Cetin, MS, Houck J, Rashid B, Agacoglu O, Stephen JM, Sui J, Canive J, Mayer A, Aine C, Bustillo JR, Calhoun VC. (2016). An approach for multimodal classification of MEG and fMRI data shows improved classification of schizophrenia versus healthy controls. *Frontiers in Neuroscience*.
- Cetin, M., Mueen, A., and Calhoun VD. (2015). Shapelet Ensemble for Multi-dimensional Time Series. *SIAM SDM 2015*.
- Cetin, M., Stephen, J., and Calhoun VD. (2015). Sensory load hierarchy based classification of schizophrenia patients. *IEEE ICIP 2015*.
- Cetin, M., Khullar, S., Damaraju, E., Michael, A.M., Baum, SA., Calhoun, VD. (2015). Enhanced disease characterization through multi network functional normalization in fMRI. *Frontiers in Neuroscience*.
- Cetin, M., Houck JM, Stephen, J. and Calhoun VD. (2015). Multi-model based classification for schizophrenia patients. *EMBC 2015*. In submission
- Houck JM, Cetin, M., Mayer, AR., Bustillo, JR., Stephen, JM., Aine, CJ., and Cañive, JM., et al. (2015). Magnetoencephalographic and functional MRI connectomics in schizophrenia via intra- and inter- network connectivity. *NeuroImage*
- Yu, Qingbao, Erik B. Erhardt, Jing Sui, Yuhui Du, Hao He, Devon Hjelm, Mustafa S. Cetin, Calhoun, VD. (2015). Assessing dynamic brain graphs of time-varying connectivity in fMRI data: Application to healthy controls and patients with schizophrenia. *NeuroImage* 107 (2015): 345-355.
- Barnaly Rashid, Mohammad Reza Arbabshirani, Eswar Damaraju., Robyn Miller, Mustafa S. Cetin, Godfrey Pearlson., and Vince Calhoun (2015). Classification of Schizophrenia and Bipolar Patients Using Static and Time-Varying Resting-State Fmri Brain Connectivity. *ISBI 2015*
- Shruti Gopal, Robyn Miller, Andrew Michael, Mustafa S. Cetin, Srinivas Rachakonda, Juan R. Bustilo, Stefi A. Baum, Vince D. Calhoun. (2015). Schizophrenia patients show increased sensory and decreased default mode spatial variability in resting fMRI networks. *Schizophrenia Bulletin*.
- Cetin, MS., Christensen, F., Abbott, CC., Stephen, JM., Mayer, AR., Cañive, JM., and Calhoun, VD. (2014). Thalamus and posterior temporal lobe show greater inter-network connectivity at rest and across sensory paradigms in schizophrenia. *NeuroImage* 97, 117–126.
- Silva, R. F., Castro, E., Gupta, C. N., Cetin, M., Arbabshirani, M., Potluru, V. K., ... & Calhoun, V. D. (2014). The tenth annual MLSP competition: Schizophrenia classification challenge. In *Machine Learning for Signal Processing (MLSP), 2014 IEEE International Workshop on* (pp. 1-6). IEEE