

# Curriculum Vitae

## Iyad Batal

<b>PERSONAL INFORMATION</b>	
	<p>Email address: iyad@cs.pitt.edu</p> <p>Cell phone: +1 (412) 519-7074</p> <p>Address : 16 Oakland Sq, apt 2; Pittsburgh, PA 15213</p> <p>Homepage: <a href="http://www.cs.pitt.edu/~iyad">http://www.cs.pitt.edu/~iyad</a></p> <p>Citizenship: US citizen.</p>
<b>EDUCATION</b>	
	<p><b>PhD candidate</b>, University of Pittsburgh, Department of Computer Science. GPA: 3.92. I am interested in applying machine learning techniques on large scale clinical data. I am currently in my third year.</p> <p><b>Combine BS/MS</b>, Damascus University, Department of Information Science. Thesis title: Building Models for Predicting Stock Prices using Technical Analysis.</p>
<b>RESEARCH INTERESTS</b>	
	<ul style="list-style-type: none"> <li>• Data Mining and Machine Learning: <ul style="list-style-type: none"> <li>◦ Association Rules Mining</li> <li>◦ Temporal Data Mining</li> <li>◦ Feature Selection/Extraction for high dimensional data</li> <li>◦ Classification</li> </ul> </li> <li>• Decision Support in Medical applications.</li> <li>• Information Retrieval and Text Mining.</li> <li>• Advanced Database applications: Indexing and Querying Spatial, Temporal and XML databases.</li> </ul>
<b>RESEARCH PROJECTS</b>	
	<p><u>Clinical Monitoring</u>: Extending classical machine learning approaches to learn from complex multivariate temporal clinical records.</p> <p><u>Anomaly detection</u>: Developing statistical anomaly detection methods for identification of unusual outcomes and patient management decisions.</p>

PUBLICATIONS	
	<p><b>I. Batal</b> and M. Hauskrecht. Constructing Classification Features using Minimal Predictive Patterns. ACM Conference on Information and Knowledge Management (CIKM) (acceptance rate 13.4%), pages: 869-878, Toronto, Canada, 2010.</p> <p><b>I. Batal</b> and M. Hauskrecht. Mining Clinical Data using Minimal Predictive Rules. Annual American Medical Informatics Association (AMIA) Conference, pages: 286- 290, Washington, DC, 2010.</p> <p>M. Hauskrecht, M. Valko, <b>I. Batal</b>, G. Clermont, S. Visweswaran, G. Cooper. Conditional Outlier Detection for Clinical Alerting. Annual American Medical Informatics Association (AMIA) Conference, pages: 31-35, Washington, DC, 2010. [<b>Homer Warner best paper award</b>].</p> <p><b>I. Batal</b> and M. Hauskrecht. A Concise Representation of Association Rules using Minimal Predictive Rules. The European Conference on Machine Learning and Principles of Knowledge Discovery in Databases (ECML PKDD) (acceptance rate 16%), pages: 87-102, Barcelona, Spain, 2010.</p> <p><b>I. Batal</b> and M. Hauskrecht. A Supervised Time Series Feature Extraction Technique using DCT and DWT. International Conference on Machine Learning and Applications (ICMLA), pages: 735-739, Miami, FL, 2009.</p> <p><b>I. Batal</b>, L. Sacchi, R. Bellazzi, and M. Hauskrecht. A Temporal Abstraction Framework for Classifying Clinical Temporal Data. Annual American Medical Informatics Association (AMIA) Conference, pages: 302-306, San Francisco, CA, 2009.</p> <p><b>I. Batal</b> and M. Hauskrecht. Boosting KNN Text Classification Accuracy by using Supervised Term Weighting Schemes. ACM Conference on Information and Knowledge Management (CIKM), pages: 2041-2044, Hong Kong, 2009.</p> <p><b>I. Batal</b>, L. Sacchi, R. Bellazzi, and M. Hauskrecht. Multivariate Time Series Classification with Temporal Abstractions. Florida Artificial Intelligence Research Society (FLAIRS), pages: 644-649, Sanibel, FL , 2009.</p> <p><b>I. Batal</b>, and A. Labrinidis. QuickStack: A Fast Algorithm for XML Query Matching, Technical Report TR-08-155, 2008.</p>
AWARDS	
	<p>Andrew Mellon Predoctoral Fellowship, 2011-2012.</p> <p>Runner-up for Best Research Award on 10th Annual CS Day, March 2011.</p>

	<p>National Library of Medicine (NLM) Fellowship, 2010-2011.</p> <p>Runner-up for Best Research Award on 10th Annual CS Day, March 2010.</p>
<b>PROFESSIONAL SERVICES</b>	
	<p>Reviewer for the ACM conference on Knowledge Discovery and Data Mining (SIGKDD), 2010.</p> <p>Reviewer for the International Joint Conference on AI (IJCAI), 2009.</p> <p>Reviewer for the American Medical Informatics Association (AMIA), 2009.</p>
<b>MISCELLANEOUS ACADEMIC PROJECTS</b>	
	<ul style="list-style-type: none"> <li>• Relational Databases as Graphs and Fuzzy Queries: my course project for the data mining course in CMU.</li> <li>• Building Ontology for the Semantic Web.</li> <li>• Java Compiler (from Lexical analysis to code generation).</li> </ul>
<b>WORK EXPERIENCE</b>	
	<ul style="list-style-type: none"> <li>• Research Intern at Yahoo!: Summer 2010.</li> <li>• Research Assistant: Fall 2008-Spring 2010.</li> <li>• Teaching Fellow (Instructor): Fall 2007-Spring 2008.</li> <li>• Teaching Assistant: Fall 2006-Spring 2007.</li> <li>• Teaching of a course on SQL and PL-SQL for Oracle: Summer 2006.</li> <li>• Developing the <i>Majestic</i> accounting software in Syria: 2005.</li> </ul>
<b>COMPUTER SKILLS</b>	
	<ul style="list-style-type: none"> <li>• <u>Numerical computing tools</u>: Matlab (professional), R.</li> <li>• <u>Programming languages</u>: Java, C#, C++, C, Lisp, Prolog.</li> <li>• <u>Web and scripting languages</u>: PHP, JSP, XML and Java Script.</li> <li>• <u>Database Systems</u>: Oracle, SQL Server, MySql.</li> </ul>
<b>LANGUAGES</b>	

	<ul style="list-style-type: none"><li>• Arabic (native language).</li><li>• English (fluent).</li><li>• French (good).</li></ul>
<b>PERSONAL INTERESTS AND HOBBIES</b>	
	Sports: basketball, kickboxing and pool.