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OBJECTIVE	Creative and hard-working professional software engineer seeking challenging opportunities in big data analytics, crowdsourcing, and infrastructural design for large-scale applications.
EDUCATION	Ph.D. and M.S. in computer science at the University of Colorado at Boulder. Bachelors of Science (B.S.) in computer science from the University of Massachusetts Amherst.
PROFESSIONAL EXPERIENCE	<p>The Crowdrouter Framework (2015-2016) Research, analysis, design, and implementation of a novel framework for architecting tasks and workflows for crowdsourcing systems (Dissertation: Barrenechea, M, 2016).</p> <p>EPIC Analyze (2013-2016) Designed and implemented a social media data analytics platform for exploring and analyzing multi-million point datasets. EPIC Analyze is designed for crisis informatics research. Led team of four developers to complete project on time. As a result, published three research papers.</p> <p>Onsystex - Software Engineer Consultant (2013-2015) Led the design and development of a REST API interface for a database engine. Provided debugging and troubleshooting for internal issues in C/C++. Released and versioned software distributions on GitHub.</p> <p>Fidelity Investments - Software Engineer (2010) Q/A testing and troubleshooting for Windows software certification on mobile and workstation devices.</p> <p>BAE Systems - Sensor Systems Engineering (2009) Researched, designed, and implemented a simulation for viewing infrared modes housed within Raptor class aircraft.</p> <p>Vertica Systems – Software Engineering (2008) Designed and developed a performance profiling tool for visualizing bottleneck queries with the Vertica database system.</p>
ACHIEVEMENTS	<p>Awarded National Science Foundation (NSF) Graduate Research Fellowship (GRF) Honorable Mention for 2012 based on three essays, recommendation letters, and research platform.</p> <p>Managed the UMass Amherst ACM Student Chapter as Vice President (2009-2010) and President (2010-2011) and hosted frequent corporate events to help link students with recruiters.</p> <p>Awarded the STEM Scholar Internship Match Scholarship in 2008 for my professional contributions to the engineering team at Vertica Systems (now HP).</p>
TECHNICAL	<p>SE processes: Agile, Rapid Prototyping, Big Data: Datastax, Solr, Cassandra, Spark, Design: Prototyping, Personas, Think-Aloud Protocol Runs, Cognitive Walkthroughs IDE: Sublime, Eclipse, Emacs, Netbeans, Visual Studio, DBMS: Cassandra, PostgreSQL, MongoDB, Solr, Vertica, MV databases, Web/Mobile: Ruby on Rails, Django, Flask, Sinatra Dev Ops: Vagrant, Puppet, Languages: Ruby, Python, Java, C/C++, HTML/CSS/JS.</p>