

Markus E. Dale
medale@acm.org
<http://uebercomputing.com>

Summary

- Software developer, researcher and instructor with big data and computer science expertise.
- Methodical problem solver with effective communication, organization and leadership skills.
- Life-long learner with keen intellectual curiosity and a passion for new challenges.

Software Development and Computer Science Research Highlights

- Developed system to ingest, store and process a variety of XML data types in Hadoop, Accumulo and Apache Spark. Hadoop MapReduce, started Apache Spark processing. Java, Scala, Apache Avro, ANTLR DSL/parser generator. Maven/Jenkins/Sonar build/continuous integration/quality management. Agile project management. Department of Defense (DOD) 2011-present.
- Developed server-side logic to interact with Hadoop batch processing and storage system for computer network defense system. Hadoop and Accumulo. DOD 2010-11.
- Developed decision logic system for computer network defense using Java, Spring, MongoDB, Oracle and TIBCO JMS. Awarded Director's Team Excellence Award 2011. DOD 2009-10.
- Developed agent-based modeling and simulation application using Repast Symphony, Java and Spring to construct an event generator for wireless environment. The Johns Hopkins University Applied Physics Lab (JHU/APL) Internal Research and Development (IRAD) 2008-09.
- Created thick client computer vulnerability analysis tool using Oracle 10g database and text indexing. Java Swing, Ant (open source version using MySQL and Lucene). JHU/APL 2003-06.
- Analyzed, designed and implemented web application for a configuration management system using Jakarta Struts, JavaServer Pages, Oracle JDeveloper, Oracle 9i Application Server and database. Raytheon, 2002-03.
- Engineered innovative web applications using Java Servlets, JDBC, XML, Apache/Tomcat and Sybase. Awarded Joint Service Achievement Medal for outstanding mission support. U.S. Navy 1999-2001.
- Created Microsoft Access Database applications to automate and electronically track Navy administrative processes. A training records tracker implemented at four Pacific Naval Security Group installations was designated an administrative benchmark during 2000 Inspector General (IG) inspection. Awarded Navy Achievement Medal. U.S. Navy 1998-2001.

Continuous Improvement and Teaching

- Created and taught Hadoop for Developers course for UMBC Training, 2014.
- Creator of DOD software development lecture series to share knowledge. DOD 2013-present.
- Instructor for "Distributed Development on the World Wide Web" Computer Science graduate course at the Johns Hopkins Part-Time Engineering Graduate program. Summer/Fall 2003.
- Developed curriculum and taught five-day Introduction to Java at Raytheon in 2002.
- Certified as National Cryptologic School Adjunct Faculty for Java programming, Solaris System Administration delivering in-depth technical content. U.S. Navy 2000-01.

Leadership and Management

- Software Development team lead. Responsible for on-time, high-quality software, technical architecture and vision, requirements management and customer interactions. DOD 2009-11, 2013-present.
- Chief Engineer for Enterprise Knowledge Systems group. Helped create group technical vision and cohesion. Enhance synergy across group projects to accomplish group goals. JHU/APL 2009.
- Section supervisor for Information Operations group at JHU/APL. Line manager for five personnel. JHU/APL 2005-06.
- Supervised seven Navy system administrators and support staff who maintained mission and mission-support systems. U.S. Navy 2000-01.
- Managed over 100 multi-service personnel as Operations Watch Officer in support of mission operations. U.S. Navy 1998-99.

Education And Training

- Completed Coursera Massive Open Online Courses (MOOCs) on Functional Programming in Scala (2012, 2014), Introduction to Data Science (2013) and University of Waikato Weka MOOC (2013).
- Recent conferences: O'Reilly Strata/Hadoop World, New York, 2012, 2013, 2014. BlackHat 2011.
- Completed course work for Ph.D. in Computer Science, University of Maryland, Baltimore County, 2004-07.
- Completed three courses in Post-Graduate Certificate in Computer Science, Johns Hopkins University, 2001-03.
- Defense Language Institute, Korean Basic Course. Graduated with Provost Award. 1996-97.
- Master of Science in Computer Science, University of Texas, Austin. Attended on full scholarship from University of Texas Applied Research Laboratory and graduated with 3.7 GPA in 1996.
- Bachelor of Science in Computer Science, U.S. Naval Academy, Annapolis. Graduated 23rd of 880 graduates with a 3.7 GPA in 1994.
- Honor Graduate of U.S. Navy Data Systems Technician school for computer hardware in 1988.
- Graduated from German High School in 1988. Schoenborngymnasium, Bruchsal, Germany. Abitur.

Employment History

- Senior Software Developer, Department of Defense (DOD), 2009-present.
- Senior Professional Staff, The Johns Hopkins University Applied Physics Laboratory, 2003-09.
- Senior Software Engineer II, Raytheon, 2001-03.
- Officer, U.S. Naval Cryptology, 1994-June 2001.
- Midshipman, U.S. Naval Academy, Annapolis, MD, 1990-94.
- Enlisted, Data Systems Technician, U.S. Navy 1988-90.

Additional Skills, Qualifications and Professional Membership

- Data Science MD Meetup, Apache Spark MD Meetup, Baltimore Scala Meetup, DC/Baltimore Java Meetup.
- Bilingual native German speaker (Defense Language Proficiency Test Listening/Reading 3/3, 2010).
- Sun-certified Programmer for the Java 2 Platform, 2000.
- Association for Computing Machinery (ACM) lifetime member.