Derek Mansen

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EDUCATION

Bachelor of Science, Software Engineering
GPA: 3.9
Rochester Institute of Technology, Rochester, NY
September 2005 - May 2010

SKILLS

Programming Languages
Java, C#, C, Haskell, Erlang, Scala, Common Lisp, Scheme, Ruby
Tools and Development Environments
Eclipse, Linux / Unix, Mercurial, Git, Oracle and MSSQL databases

PROJECT EXPERIENCE

Data Ontology Cache System   November 2010 - May 2011
Two Sigma Investments
New York, NY
- Developed system for storing and querying an OWL-based ontology
- Team-based project with students given full autonomy
- Gathered requirements and developed an agile, risk-oriented process with iterative releases
- Developed system for storage and analysis of massive quantities of semantic data
- Worked with semantic data analysis technologies: OWL, RDF, Pellet, and Jena
- Designed an ActiveMQ-based messaging system for communication between clients and servers
- Designed and implemented replication system that replicated data and handled query load balancing across multiple servers

PROFESSIONAL EXPERIENCE

Associate Applications Engineer   June 2010 - Present
Oracle Corp., Primavera GBU
Bala Cynwyd, PA
- Taking on many different roles as the need for them arises
- Given ownership of a large subcomponent of the system soon after beginning employment
- Developed critical data migration tool for customer use
- Identified and fixed several large-scale performance bugs prior to release
- Quickly acclimate and make meaningful contributions to the codebases of different products

Software Engineering Intern   June 2009 - August 2009
Virtual Solutions Inc.
Cambridge, MA
- Worked on several components of a production-ready C#/C++ system
- Designed and implemented vector-based matching algorithm to align machine text on printed form
- Created the character classification component of a neural network based character recognition system

Software Engineering Intern   November 2008 - February 2009
General Dynamics Advanced Information Systems
Pittsfield, MA

- Developed embedded C++ code for use on a Naval vessel
- Implemented a state machine-based system which dispatched commands to Naval hardware
- Gained experience with POSIX programming: threads, synchronization, and memory management

RESEARCH INTERESTS

Functional programming
Concurrent systems
Static type systems and analysis
Programming languages