

Marc Spehlmann

Contact

(224) 436 2298
spehlmann@wisc.edu
spehl.net

Address

402 Chamberlain Ave #5
Madison, WI 53726

I am a second year Masters student in Computer Science and am currently looking for full time positions in the area of databases or systems. I currently work as a research assistant for a databases project, QuickStep.

Education

B.A., Computer Science
Knox College. Galesburg, IL
GPA: 3.9/4.0

M.S., Computer Science
University of Wisconsin. Madison, WI
Expected: June 2017

Software Engineering Internships

Pivotal

Summer 2016

- Worked on the open source query optimizer, ORCA
- Improved optimization speeds on queries involving array predicates
- Solved customer issues while pair programming with the query optimizer team

Epic Systems.

Summer 2014

- Created a medical systems interface test tool in C#
- Required writing COM, TCP/IP, and XML message interfaces
- Iteratively released app, responding to user requests for features

Teradyne, Inc.

Summer 2013

- Individually built several displays for electronic circuit debugging
- Evaluated the feasibility of moving from VB6 to .NET framework
- Experience working within a large business application framework

Projects and Research

Quickstep Database

UW Madison
2015-2016

- Implemented Small Materialized Aggregates index and new SQL language constructs from parser to executor
- Systematically gathered results for TPC-H, a database benchmark
- Researching areas to improve query execution

HPC Research

Knox College.
Winter 2014, Summer 2015

- Created a network simulator in Java for testing task mapping on high performance computing networks
- Solved bisection problems on large graphs using parallel techniques and developed genetic technique to improve runtime
- Co-authored: *Comparing Global Link Arrangements for Dragonfly Networks*

Farmet Startup (farmet.co)

Spring/Summer 2015

- Created a small produce distribution company
- Built a website to handle transactions, providing a backend for the team to track orders, set delivery dates, etc.

Learning

Coursework

Systems

- Computer Design, Software Engineering, Advanced Databases, Advanced OS, Advanced Compilers, Networking

Data

- Cryptography, Artificial Intelligence, Data Science

Technical Skills

Languages (in order of expertise)

- C/C++, Java, Python, SQL, Ruby, HTML\CSS\JS, MATLAB

Awards

Knox: Paul's Award in CS 2015, Summa Cum Laude
2012, 2014 ACM Programming Contest Participant