# **Peter L Vilim**

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Software Projects: www.peterlvilim.com

### **EDUCATION**

#### University of Illinois at Urbana-Champaign

GPA 3.5/4.0

**Masters Computer Science** 

December 2014

B.S. Industrial Engineering (Operations Research with Minor Computer Science)

May 2012

James Honors Scholar

Dean's List: top 20% College of Engineering (spring 2009, spring 2010)

llinois General Assembly Scholarship: full tuition based upon academics and community service (2009-2010 and 2010-2011)

### **WORK HISTORY**

**Delphix** (database virtualization startup)

Summer 2014

Software Engineering Intern

Developed methods for managing and visualizing data within virtual databases

Developed and implemented graph algorithms for advanced visualizations

### Essex Radez (options execution firm)

July 2013-April 2014

Software Developer/Consultant

Developed systems for clearing and high speed execution of financial derivative products

### **Deloitte Consulting (global consulting firm)**

July 2012-December 2013

Consultant - Technology Strategy

Created and communicated strategy roadmaps for IT departments of several Fortune 500 companies

# Rayner & Rinn-Scott (hardwood lumber distributor)

January 2012-Ongoing

Software Developer/Consultant

Developed software for transportation optimization with automatic route planning and cost estimates

Ability to manually plan and visualize routes as well as automatic route planning via linear optimization and metaheuristic

Post route analysis tools for evaluating cost savings

#### **W.W. Grainger** (Fortune 300 business-to-business supplier)

Summer 2011

**Supply Chain Intern** 

Developed high level estimates and plan for \$100M+ expansion of 1.4M sq. ft. distribution center

#### **Argonne National Laboratory** (Department of Energy research lab)

Summer 2007-Summer 2010

Software Development Intern - Full time during summer breaks and part time during academic year

Lead software developer and co-inventor of patent-pending system for tracking radioactive dirty bombs

Created system for automated tracking via video camera.

Implemented concurrent versions of cutting edge signal processing algorithms, user interfaces, and network code

Documented final working system for invention report

## **SKILLS**

Languages: C++, Java, Python, C, C#, Javascript, SQL, PHP, Perl, Matlab, HTML

Libraries/Frameworks/Protocols: C++ Standard Library, Boost, Linux development, jQuery, Node.js, D3.js, Knockout.js, JSON, AJAX, RS 232 Serial, TCP/IP, routing protocols, HTTP, USB, DirectX, Microsoft MFC, Microsoft .NET, MapReduce, Solarflare Onload, Apache Thrift, Hadoop, Spark, Shark, Hive, BlinkDB, data mining, SVN, Git

**Development patterns:** threading and concurrency, distributed systems, data structures, sorting/search/graph algorithms, data mining **Mathematics:** machine learning, linear optimization, applied statistics, stochastic processes, simulation, data mining, graph theory **Communication:** technical writing proficiency, extensive public speaking experience, exceptional ability to communicate technical concepts clearly to persons with technical and non-technical backgrounds

**Teamwork/Leadership:** strong ability to work with members of a multi-disciplinary team, self-starter with experience working in shallowly scoped projects