

## SUMMARY

Student, developer, and researcher seeking a challenging, cutting-edge software engineering position at a company with a need for competitive technical skills, problem solving ability, adaptability, determination, and creativity.

## EDUCATION

### University of Illinois, College of Engineering

#### M.S., Computer Science

May 2013

GPA: 3.83

- Enrolled in accelerated 5 year combined BS / MS program
- Master's thesis modeling CoMoTo software similarity graphs as heterogeneous temporal & similarity graphs, to investigate and predict student collaboration patterns, jointly advised by Cinda Heeren and Jiawei Han

#### B.S., Computer Science, Minor in Mathematics

May 2012

GPA: 3.98

- Senior Thesis titled *Efficiently Retrieving Relevant Pages for Fully-Qualified Entities*, advised by Kevin Chen-Chuan Chang
- James Scholar honors program, software engineering certificate, specializing in databases and systems

## AWARDS

### Jump Trading Scholar

2011 - 2012

### Crowe Horwath LLP Outstanding Computer Science Student

2011

### Daniel L. Slotnick Scholarship

2011

### Dean's List

2008 - Present

## SKILLS AND COURSEWORK

### Current and Completed Coursework:

Fundamental Algorithms, Machine Learning, Software Engineering Seminar, Software Engineering II, Cloud Computing, Computer System Organization, Software Engineering, Graph Theory, Graduate Compilers & Programming Languages, Text Information Systems, Distributed Systems, Theory of Computation, Database Systems, Operating Systems Programming, Data Structures and C++, Programming Studio

### Technical Skills:

Java, C++, C, Python, JavaScript, C#, PHP, SQL, HTML5, CSS3, Ocaml, Ruby, Linux, Git, Subversion, Mercurial, and much more

## PUBLICATIONS

### CoMoTo – The Collaboration Modeling Toolkit

ITICSE '11

By Charlie Meyer, Cinda Heeren, Eric Shaffer, and Jon Tedesco

### Developing Generalizable Principles for Object-Oriented Search Engine Interface Design

UIUC URJ Spring 2010

By Jon Tedesco and Kim Cuong Pham

## EXPERIENCE

### DRW Trading Group, Chicago, IL

#### Software Engineering Intern

Summer 2011

- Created open source NPAPI plugin *SockIt* to perform low-level networking using client-side JavaScript to improve performance and flexibility of the WebSockets implementation, and to allow JavaScript implementations of arbitrary networking protocols
- Studied performance and efficiency impact of Intel's new AVX instruction set for floating point operation intensive applications

### Bank of America, Chicago, IL

#### Technology Analyst Intern in Capital Markets & FX Options Ask/GUI Team

Summer 2010

- Developed GUIs for large-scale applications used for reporting and documentation of Bank of America's FX and options trading in real time.
- Designed and implemented standalone code base for FTP reporting, and helped develop back-end of database-centric applications.

### University of Illinois, Urbana, IL

#### CS242 Programming Studio Undergraduate TA

Spring 2011 – Present

- Leads multiple discussion sections, grades student submissions, and instructs students in programming practices, coding style, and substantive multi-language programming projects

#### Undergrad CS Research Liaison for P.U.R.E.

Fall 2010 – Present

- Recruits graduate and faculty mentors, undergraduates mentees, and acts as CS representative of college-wide undergraduate research organization PURE, Promoting Undergraduate Research in Engineering
- Promotes program through staff relations and presentations in mainstream undergraduate CS classes

#### Software Developer for CoMoTo Project

Fall 2010 – Present

- Rewriting interactive web-based collaboration visualization using JavaScript, d3.js, and CoMoTo API
- Maintains Python-driven web application used for analyzing student code submissions, detecting software similarity, and analyzing collaboration patterns of students in undergraduate classes throughout the department
- Implemented and maintains Java application for visually analyzing student collaboration patterns to detect cheating in undergraduate classes