# Joseph Michael Spitzer Computer Science Graduate Student

electronic mailing address cellular telephone number

#### **Education**

University of Massachusetts

Amherst, MA 2018 - Present

M.S./Ph.D. Computer Science (4.00)

Saint Paul, MN 2010 - 2015

- University of Saint Thomas
- B.A. Computer Science (4.00) & B.A. Mathematics (3.75)
  - Magna Cum Laude graduate with a cumulative GPA of 3.89.

## **Employment (Academia)**

- Graduate Research Assistant (September 2018 Present) A member of the research labs concerning programming languages and software engineering. Most recently worked with a team on highlighting the shortcomings of programming within the serverless computing space and purposing a solution by way of an agnostic DSL.
- Undergraduate Teaching Assistant (Fall 2014 & Spring 2015) Graded homework and held office hours to provide assistance to students as needed. Worked with a Linear Algebra section in the fall and a Discrete Mathematics section in the spring.
- Computer Science Tutor (September 2013 May 2015) Assisted students with programming; debugging and understanding concepts. Primarily in the context of Java and JavaScript.
- Disability Resources Student Assistant (Fall 2012, Fall 2013, & Fall 2014) Took careful notes for those with learning deficiencies in Introduction to Programming and Web Development. Also scribed on the behalf of a blind student for Data Structures exams.
- Undergraduate Research Assistant (January 2011 January 2015) Regarding computational knot theory; involved problem-solving and scripting skills. Particular projects included the explicit characterization of tight knot configurations and working toward the discovery of new knotting patterns in folded proteins. Presented results on seven occasions, with emphasis on student poster sessions at the 2014 (Baltimore) & 2015 (San Antonio) Joint Mathematics Meetings.

### **Employment (Industry)**

- Software Engineer at Veritas Technologies (June 2017 August 2018) Continued responsibilities as a recognized resident subject-matter expert concerning our web client. Co-lead the front-end community of practice. Implemented several core modules and features of the user interface, both customer facing and non-customer facing. Transitioned to application middleware development on CloudPoint<sup>TM</sup>-multi-cloud data management—the last eight months of my tenure. Worked to help redesign and rewrite an API gateway for improved usability and scalability.
- Associate Software Engineer at Symantec Corporation/Veritas Technologies (June 2015 May 2017) Front-end developer on an Agile-Scrum team for Veritas Velocity<sup>TM</sup>, an advanced copy data management application. Responsible for fixing code defects, implementing new product features, and writing automated tests. Collaborated across teams with seasoned engineers as well as our project's dedicated user experience and technical writing resources to deliver a robust web interface for our customers.

#### **Honors & Presentations**

- Veritas Developer Exchange Program (March 2017) Selected to travel to another corporate site (Orlando) in order share knowledge and enhance team rapport. The week-long trip was filled with collaboration and assistance on feature development as well as several meetings with our domain architect. Additionally, lead a daily seminar on front-end software engineering within the context of our product.
- Presenter at Veritas Cutting Edge (November 2016) Technical talk titled "JavaScript: The Cutting-Edge Parts" at annual internal engineering conference. Presentation focused on principles of JavaScript development such as dynamic typing and functional programming, before giving an overview of new language features introduced in ECMAScript 6.
- Categorical Winner at Veritas Hackathon 3.0 (July 2016) Accompanied by a product owner and user-interface designer, we produced a small web-app in the 24-hour allotted time. Built with AngularJS and Bootstrap, the application sought to streamline the employee on-boarding process into a succinct collection of information, reference materials, and forms.
- IBM CASCON Emerging Technologies Track; Paper & Lecture (November 2015)

  Annual International Conference on Computer Science and Software Engineering hosted by IBM in Toronto. Publication titled "Harnessing the Power in your Pocket" sought to explore the architectural and design implications of utilizing unused cycles on employee company-issued mobile devices, much like SETI@home does with personal computers, to process business intelligence data. Gave a lecture at the conference with an associated slide deck based on the paper.
- Co-Presenter at Symantec NetBackup<sup>TM</sup> Customer Forum (September 2015) Forum was open to technical individuals from companies who are customers or partners of NetBackup<sup>TM</sup>, the corporation's flagship product. Assisted a product manager and user-interface researcher in standing up a demo environment and orchestrating a walk-through of an upcoming new product.
- National Society of Collegiate Scholars (NSCS) Induction (April 2012) A non-profit honors organization for collegiate students accredited with the Association of College Honor Societies.
- Badger Boys State (June 2009) Week-long leadership and citizenship program sponsored by the American Legion for those nominated by their high school.

#### Technical Skills

- Languages/Frameworks: JavaScript, Jasmine, Restify, AngularJS, Protractor, HTML5, CSS, Java, TypeScript, LATEX
- Environments/Tooling: Unix (CentOS/Ubuntu/macOS), Bash, Firefox, Node/NPM, Git/GitHub, Google Cloud Platform (Datastore/Cloud Functions)
- Concepts/Protocols: JSON, DOM, MVC, HTTP, WS, REST/SOAP, UML