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EDUCATION:

University of Wisconsin-Milwaukee, Milwaukee, WI
Ph.D.: Computer Science, January 2018 - Present

University of Wisconsin-Milwaukee, Milwaukee, WI
Master of Science: Computer Science, September 2015 - May 2017
Focusing on Lattice cryptography (post-quantum crypto) and LWE-KEX for master thesis
Thesis title: [Analysis of BCNS and NewHope key-exchange protocols](#)

University of Wisconsin-Milwaukee, Milwaukee, WI
Bachelor of Science: Computer Science, September 2011 - May 2015 (with Honors)
GPA: 3.71

Technical Skills:

- **Languages:** C#, Java, JavaScript, Typescript, Scala, SQL, Prolog, MIPS, Python, Ruby, F#, and SML
- **Front-end:** HTML, CSS, Angular, React, Backbone, jQuery, Bootstrap, ZURB Foundation, Lodash
- **Back-end:** .NET, Node.js, Express.js, Sinatra, NancyFx, Django, Flask, and Java Servlets
- **Database:** SQL, MongoDB, Azure blob, and Azure Table Storage

EXPERIENCE:

Northwestern Mutual, Milwaukee, WI

Full-Stack Software Engineer, November 2017 - Present

- Utilized MongoDB, .NET Core, and React/Redux to build a bond benchmarking application
- Utilized and extended C# LINQ Expression tree to create a business rule engine
- Utilized StructureMap library (IoC) to implement a proxy pattern for data-access-layer (DAL)
- Utilized dynamic proxy and AOP paradigm to implement dynamic method parameter validation
- Utilized asynchronous python (PyMongo + Motor) to create a mongo database cleanup script
- Utilized windows service, Akka.NET, and SignalR to create a distributed application
- Utilized Kafka, Azure Event-Hub, and Vue.js to create a real-time log monitoring page
- Utilized Scala Spark to create a compute engine for bond investment benchmark calculations
- Created a company-wide .NET Core boilerplate to be used for future applications
- Created a CSV library to import/export complex objects
- Created a C# library to emit simple C# classes and include them in the application all at runtime
- Created a JWT token management FSM to manage/refresh JWT tokens
- Conducted multiple company-wide C# .NET Core / Angular workshops

Brady Corporation, Milwaukee, WI

Software Developer, January 2017 - October 2017

- Worked as part of the digital team, using jQuery, Backbone.js (legacy), Angularjs, and Foundation to upgrade existing e-commerce website (BradyID.com) and componentize JavaScript codes
- Created a single-page JS app to product search and narrow down categories/subcategories by interacting with Elasticsearch API
- Contributed to making website mobile responsive using CSS, SASS and flex-box
- Converted legacy Backbone.js code to Angular.js
- Introduced Node, Bower, and Gulp to build task to manage front-end dependencies
- Worked with C#, Sitecore, and .NET Standard for back-end

- Wrote Selenium tests in C# using ChromeDriver and PhantomJS (headless browser)

UW-Milwaukee Department of Computer Science, Milwaukee, WI

Graduate Teaching Assistant, September 2015 - May 2017

TA for CS-315 (Assembly language programming - MIPS). Duties and responsibilities:

- Conducted discussion and lab sessions
- Wrote and grade questions for programming sections of the exams
- Wrote and grade weekly programming homework
- Wrote lecture notes for students and other TAs responsible for this class

Northwestern Mutual, Enterprise Projects Department, Milwaukee, WI

Intern Internet Application Developer, June 2015 - August 2015

OBA Project (Scrum Team)

- Worked mostly with Underscore.js, Backbone.js, and Backbone-forms module for front-end of "outside business activity wizard" web application (OBA wizard), and also Node.js / Express.js for proof of concept work
- Added grunt and bower to build the project's dependencies, Minify JavaScript files, and perform package management and versioning
- Converted all of the outside business activity disclosure forms to the relational database format (IBM DB2 and SQLite), in addition to design wizard steps and paths to allow wizard application fetch data and create forms
- Worked briefly with Java EE and WebSphere for the back-end (Web-UI and Web Services)

UW-Milwaukee Department of Material Science and Engineering, Milwaukee, WI

Undergraduate Researcher, May 2013 - May 2015

- Worked with Dr. Pradeep Rohatgi (Distinguished Professor) to implement MAGMA and SolidWorks software to simulate the Solidification of different materials and teach graduate students how to use the software. Utilized knowledge in Computational Geometry and Differential Equations

Swick Technologies, Wauwatosa, WI

IT Specialist, July 2011 - August 2011

- Worked with Active Directory and Microsoft Deployment Services to deploy Windows-7 on High School computers

HONOR & AWARDS:

- FEF / AFS Scholarship, 2014, 2015 and 2017: 3 X \$1000
- Certificate of Merit, 2013. For Outstanding Academic Achievement in Mathematical Science 234: Linear Algebra and Differential Equations
- Dean's list in years 2011, 2012, 2013, 2014
- Graduating from the College of Engineering and Applied Science with Honors, 2015
- First place in the first round of Northwestern Mutual Fusion Hackathon 2018 out of 120+ teams

Additional Activities:

- Volunteered to develop the "Tour of Milwaukee" website (MilwaukeeInternationals.com) to facilitate annual UW-Milwaukee city tour for new international university students
- Participated in Northwestern Mutual ML Hackathon to build a social network analyzer app (SNA) using polynomial regression, NLP sentiment analysis, and key phrase detection

Work Authorization:

- Naturalized U.S. citizen (naturalized in 2015)