

## Summary

Experienced software engineer and consultant with a background in computer science, geographic information science, and mathematics. Creative yet pragmatic in development and implementation, as well as problem resolution. Excellent written and oral communication skills and interpersonal dynamics, with proven ability to effectively use those skills to ensure transparency and agreement between technical and non-technical stakeholders. Engaged and knowledgeable individual that is goal-oriented, proactive, and effectual.

## Experience

### Software Developer

April 2014 - Aug 2018

BNL Consulting, LLC.

- Designed, developed, or contributed to seven (7) client projects.
- Designed and implemented microservices to automate internal workflow components and processes for client's existing commercial SaaS offering resulting in a geometric increase in customer capacity.
- Technical lead for internal DevOps R&D project that containerized our commercial SaaS application and subsequent deployment using Infrastructure-as-Code, configuration management, container orchestration, and public/private cloud platforms that was later included in our product offering.
- Core developer for two (2) year client project that entailed refactoring existing application from .NET to Java, implementing RESTful web services, improving ETL and analytics processes, expansive search functionality, and data modeling.
- Contributed to the development of business intelligence / analytics web applications utilizing NodeJS, AngularJS, and d3.js.
- Authored blog posts [Cloud-First Microservices: AWS API Gateway and Lambda in Action](#) and [Visualizing Clusters with ArcGIS for Flex](#).

## Education

### Credit Hours towards

Aug 2012 - Dec 2013

### Masters in Computer Science

University of Tennessee at Chattanooga

### Post-Baccalaureate in Computer Science

July 2011 - May 2012

University of Tennessee at Chattanooga

- Graduate Teaching Assistant for two (2) semesters.
- Graduate Research Assistant for two (2) semesters.

### Bachelor of Arts in Geography

Aug 2007 - May 2011

University of Tennessee at Knoxville

- Award recipient at the Exhibition of Undergraduate Research and Create Achievement (EURéCA).
- Tutor at the UTK Math Tutorial Center.

## Skills

### Web Technologies

NodeJS, ES2015, Babel, Yarn, Webpack, ReactJS, CSS Preprocessors, JavaScript Transpilers

### Java

Java SE 12, Jakarta EE, Maven, Gradle, JUnit, Mockito, Java Persistence API (JPA), Hibernate, Spring Framework, Spring Boot, Spring Security, Spring Web MVC, Spring Data, Spring Batch, Micronaut, Lombok, Immutables

### Databases & Datastores

Oracle + PL/SQL, PostgreSQL + PL/pgSQL, MySQL, Redis, MongoDB, DynamoDB, Lucene/Solr

### Amazon Web Services

Lambda, API Gateway, Virtual Private Cloud (VPC), Elastic Compute Cloud (EC2), Simple Storage Service (S3), Elastic Block Store (EBS), Identity Access Management (IAM), Elastic Load Balancer (ELB), Route 53, Relational Database Service (RDS), DynamoDB, AWS CLI

### DevOps

Jenkins, Docker, Ansible, Packer, Terraform, Consul, Nomad

### Software Engineering

Test-Driven Development (TDD), 12-Factor Applications, Domain-Driven Design, Enterprise Integration Patterns (EIP), Inversion of Control (IoC), Aspect-Oriented Programming (AOP), Object-Relational Mapping (ORM), Continuous Integration / Continuous Deployment (CI/CD), Configuration Management, Container Orchestration, Service Discovery, Serverless

### Computer Science

Algorithms and Datastructures, Programming Methodology, Systems Programming, Theory of Programming Languages, Theory of Computation, Computer Architecture, Computer Networks, Parallel Algorithms, Cloud Computing, Mobile Computing, Systems Software

### Mathematics

Computational Geometry, Automata Theory, Set Theory, Combinatorics, Graph Theory, Probability, Differential Equations, Calculus, Linear Algebra, Statistics, Spatial Statistics, Machine Learning

## Certifications

- AWS Certified Developer - Associate
- Adobe Certified Expert Flex 4.5