# Sean M. Baskin

# Summary

Experienced polyglot 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.

# Education

#### **Credit Hours towards**

Aug. 2012 - Dec 2013

## **Masters in Computer Science**

University of Tennessee Chattanooga

- Graduate Teaching Assistant for two (2) semesters.
- · Graduate Research Assistant for four (4) semesters.

#### **Post-Baccalaureate in Computer Science**

July 2011 - May 2012

University of Tennessee Chattanooga

#### **Bachelor of Arts in Geography**

Aug. 2007 - May 2011

University of Tennessee Knoxville

- Award recipient at the Exhibition of Undergraduate Research and Creative Achievement (EURéCA).
- Engaged in directed research under <u>Dr. Bruce Ralston</u> on advanced web mapping techniques including map classification functions, customized user interfaces, and developing data services.
- · Tutor at the UTK Math Tutorial Center.

# Certifications

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

# **Skills**

#### Front-end Development

ECMAScript 2016, JavaScript, NodeJS, AngularJS, ExpressJS, d3.js, Yarn, Webpack, Android, Apache Flex

### **Back-end Development**

Java SE 12, Java EE 8, Maven, JUnit, Mockito, Java Persistence API (JPA), Hibernate, Spring Framework, Spring Boot, Spring Web MVC, Spring Data, Spring Security, Spring Batch, Quartz, Apache Tomcat, Apache ActiveMQ

#### Data Stores

 ${\it Oracle, MS~SQL~Server, PostgreSQL, SQLite, MongoDB, DynamoDB, Redis, Lucene/Solr}$ 

### Amazon Web Services

Lambda, API Gateway, VPC, EC2, S3, EBS, IAM, ELB, Route 53, RDS, DynamoDB, AWS CLI

#### DevOps

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

#### **Programming Languages**

Java, JavaScript, Python, C, C++, Go, R, Julia, SQL, Bash, ActionScript

# Software Engineering

Agile Methodologies, Test-Driven Development (TDD), Continuous Integration (CI), Continuous Deployment (CD), Enterprise Integration Patterns (EIP), Version Control Systems

### **Computer Science**

Algorithms and Datastructures, Programming Methodology, Systems Programming, Theory of Programming Languages, Computer Architecture, Computer Networks, Cloud Computing, Mobile Computing, Systems Software, Computational Geometry, Machine Learning

## **Geographic Information Science**

Cartography, Coordinate Systems and Projections, Spatial Data Models, Remote Sensing, Spatial Statistics, Geostatistics, Geovisualization, Spatial Decision Support Systems (SDSS)

### **Mathematics**

Set Theory, Graph Theory, Topology, Combinatorics, Probability, Differential Equations, Calculus, Linear Algebra, Statistics

# 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.
- Technical lead for internal R&D project that containerized our commerical SaaS application and subsequent deployment using Infrastructure-as-Code, configuration management, container orchestration, and public/private cloud platforms that was 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 <u>Cloud-First Microservices</u>: <u>AWS API Gateway and Lambda in Action</u> and <u>Visualizing Clusters with ArcGIS for Flex.</u>

#### **Open Data Specialist**

Feb. 2014 - April 2014

Chattanooga Public Library

- Coordinated with the City of Chattanooga Mayor's Office and various departments to identify and disseminate government data to the public.
- Evaluated available data portal solutions and managed chosen platform.

#### Consultant

Jan. 2014 - Feb. 2014

Self-Employed

- · Configured, deployed, and designed a WordPress instance for the client.
- Produced thematic maps for one-hundred seventy (170) miles of the Etowah River Water Trail.

#### **Graduate Research Assistant**

Aug. 2012 - Aug. 2013

University of Tennessee Chattanooga

- Contributed to the development of a distributed geospatial web application within the context of the Thrive 2055 initiative.
- Additionally, developed an Android application for the collection of WiFi signal strength and location data for the campus of the University of Tennessee at Chattanooga.









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#### **Software Developer**

May 2012 - Aug. 2012

SecondSite, LLC.

- Contributed to the development of an augmented reality (AR) mobile application for the Smithsonian National Museum of African American History and Culture.
- Contributed to the development of an augmented reality (AR) mobile application that provided an innovative system for the maintenance of art and artifacts.

#### **GIS Consultant**

Feb. 2012 - April 2012

Self-Employed

- Provided consulting services to SecondSite, LLC and the SimCenter Enterprise for Disaster Mitigation Plume/Evacuation Scenario Modeling as part of the U.S. Ignite Initiative.
- Developed custom ETL processes and three-dimensional mesh artifacts from high-precision urban LiDAR datasets.

#### **Graduate Research Assistant**

June 2011 - Feb. 2012

University of Tennessee Chattanooga

- Assisted in the deployment and management of ArcGIS Server and ArcSDE databases.
- Collected, documented, and organized spatial datasets for the Regional Resource Inventory project.
- Developed RESTful geoprocessing tasks and implemented ArcGIS API for Flex web application to consume them.

#### **Graduate Teaching Assistant**

Aug. 2011 - May 2012

University of Tennessee Chattanooga

• Graded papers, assisted in labs, proctored exams, and on occasion stood in for my professor during class lectures.

intern

July 2010 - Aug. 2011

Tennessee Valley Authority

- Designed and implemented enterprise spatial database of sonar-generated point data for TVA's Tennessee River system, including data management, documentation and metadata, and the production of bathymetric maps, TINs, and DEMs
- Upon request, I fulfilled client tasks pertaining to the data such as cross-section analysis and spatial queries.

#### **Math Tutor**

Aug. 2008 - May 2010

University of Tennessee Knoxville

 Tutored students at the UTK Math Tutorial Center on material ranging from Calculus I to Calculus II and proctored exams.

#### Lifeguard

May 2008 - Aug. 2008

Sportsbarn

#### **Lifeguard** YMCA

May 2006 - Aug. 2007

Cashier

May 2005 - Aug. 2005

Carmike Cinemas

# **Founder and Owner**

Jan. 2003 - Dec. 2005

LoserLabeled.com

- Loserlabeled.com was a website with a focus on skateboarding that offered original articles, tutorials, media, and a vibrant user community.
- It was designed and developed with two partners that utilized search engine optimization (SEO) techniques and Google Adsense program to generate profitable advertising revenue.



