

Samuel Garcia Jr.

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I have 20 years of software development experience, many of those as a tech lead and mentor, and a record of delivering business value. I love creating innovative solutions and will always bring my curiosity, creativity, initiative, and leadership to bear when solving complex business problems. I am looking for growth opportunities in new problem domains, especially those involving system design, applied math, and statistical analysis.

TECHNOLOGIES AND LANGUAGES

- Languages: Java, SQL, Javascript (vanilla), HTML, CSS
- Technologies: Spring, Spring Boot, Hibernate, Flyway, Git
- Other: API design, relational databases, template frameworks
- Working knowledge of: Python, Applied math, Algorithms, Data structures, Functional programming

WORK EXPERIENCE

Technical Lead (Research Scientist II)

Mar 2018 – Present

Georgia Tech Research Institute

Atlanta, Georgia

- Lead a team of 10 in the modernization of a monolithic web application. The modernized system has been streamlined, enhanced, and deployed in AWS.
- Led requirements-gathering sessions, feature discussions, and product demonstrations with the project sponsor.
- Optimized slow-performing queries, reducing the runtime of Jaspersoft reports by an average of 87%.
- Optimized slow-performing APIs and services by profiling code using VisualVM and refactoring.
- Design and develop RESTful APIs.
- Mentor junior developers and on-board new developers.
- Technologies: Java, Spring, Hibernate, SQL, MySQL, Flyway, Jaspersoft

Developer (Research Scientist II)

2016 – 2018

Georgia Tech Research Institute

Atlanta, Georgia

- Designed and developed the RESTful API layer of a large web application which supports about 8,000 users.
- Designed and developed database schema, tables, views, static and dynamic SQL.
- Mentored 3 junior developers on the API team.
- Technologies: Java, Spring, Hibernate, SQL, MySQL, Flyway, Jaspersoft

Software Architect

2015 – 2016

Castle Medical, LLC

Smyrna, Georgia

- Designed, developed, and deployed a web application for scheduling sample pickups, which saved the customer-service team 6 hours of scheduling and data-entry per day.
- Developed a web application to provide the sales team with secure access to documents and resources not meant for public access.
- Technologies: MariaDB, Apache, HTML, Javascript, Bootstrap CSS, PHP

Software Developer (Contractor)

2012 – 2015

Norfolk Southern Corporation

Atlanta, Georgia

- Designed and developed a web GIS application for visualizing and tracking the movement of locomotive assets.
- Developed a mobile GIS library, as a mechanism for integrating GIS functionality into legacy web applications.
- Designed and developed a web application which provides decision support for planning and optimization of locomotive maintenance schedules.
- Enhanced and supported a web application which provides optimal fleet sizing and train assignments for the locomotive fleet.

- Technologies: Java, Spring MVC, Hibernate, DB2, Velocity templates, JFreeChart, Javascript, ArcGIS JS API

Technical Lead (Contractor)

2008 – 2011

National Oceanic and Atmospheric Administration (NOAA)

Germantown, Maryland

- Led a technical team of 4 in the development and support of NOAA Grants Online. Grants Online shortened the total processing time for awarding grants by 3 months.
- Extended the Grants Online system's design and business process workflows in order roll the system out to additional bureaus within the Department of Commerce: MBDA, ITA, NTIA, and OHRM.
- Enhanced the user interface look-and-feel to change dynamically based on user preferences and the user's bureau affiliation.
- Developed and maintained system-to-system interfaces to allow integration and interaction with 5 external systems at key points in the lifecycle of an award.
- Technologies: Java, Spring, SQL, HTML, CSS, Javascript, Oracle

Technical Lead (Associate Designer)

2006 – 2008

Norfolk Southern Corporation

Atlanta, Georgia

- Led a technical team of 6 in the design, development, and testing of a custom message broker application as part of Norfolk Southern's Train Control initiative. This messaging middleware provided audit, data augmentation, transformation, routing, and integration between the dispatching system and the Optimized Train Control system.
- Technologies: Java, SQL, DB2, IBM MQ

Senior Developer

2003 – 2006

Norfolk Southern Corporation

Atlanta, Georgia

- Designed, developed, deployed, and supported a message broker application which integrated the back-ends of 12 internal applications with a new dispatching system.
- Developed, deployed, and supported enterprise applications for use by Norfolk Southern's department of Transportation Planning.
- Technologies: Java, SQL, DB2, IBM MQ

Developer

2001 – 2003

Norfolk Southern Corporation

Atlanta, Georgia

- Developed user-interface components, services, and database queries of a custom desktop application for tracking train movements. This system replaced paper train sheets used by Norfolk Southern dispatchers.
- Deployed and supported the new Train Sheet System, and provided first-class, on-call customer support.
- Technologies: Java, SQL, DB2, IBM MQ

EDUCATION

Georgia Southern University

2000

BS, Computer Science

Statesboro, Georgia