**Michael Gardner**

**Computer Programmer**

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| Key Skill Sets |
| * Java * Angular * ReactJS * JavaScript * TypeScript * Spring MVC * Spring Boot * Spring Templates * HTML * CSS * XML * JSON * Eclipse * Tomcat * Maven * Git * Oracle * MS SQL Server * SQL * Hibernate * Red Hat Linux |

Senior Java Developer with proven track record of providing technical solutions to meet business objectives. Over 20 years of experience in software design, development, technical and requirements analysis, team leadership and client relationships. Expert in Java application and database programming and adept at evaluating and integrating new technologies to enhance existing applications.

**relevant experience**

Booz Allen Hamilton, Lead Technologist, Dec 2016–Apr 2024

* Developed Registry Portal (RP), Annual Hospital Report (AHR) and Annual Hospital Interview (AHI) Spring Boot RESTful applications for CDC/NCHS (National Center for Health Statistics) using Angular as front-end, with SQL Server as the back-end database, the CRUD process was managed using a combination of Hibernate, JPA, & custom SQL. AHR used D3.js for graphical data visualization and reporting.
  + - Registry Portal: Enables eligible health care providers to register their intent to submit Electronic Health Record (EHR) data to NCHS for inclusion in their program Promoting Interoperability (PI) or Merit-based Incentive Payment System (MIPS) programs.
    - AHR (Annual Hospital Report): Allows participating hospitals to access NCHS created reports and white papers. EHR, UB-04, state files, & Vizient data formats are supported.
    - AHI (Annual Hospital Interview): Enables invited participating hospitals to answer questions about summary administrative hospital data.
* Built an automated utility in PowerShell, using the WinSCP .NET library and Windows Task Scheduler, to copy EHR from CDC SAMS remote secure share (SSH) into a local secure CDC network for NAMCS ( National Ambulatory Medical Care Survey) in patient contacts reporting with physicians offices.
* Provided system/administration support for HelpSpot, a help desk issue tracking software used by RP, AHR, AHI, and NAMCS to track user issues from ticket creation through resolution.
* Provided technical SME support to analyze and resolve escalated HelpSpot tickets for all apps.
* Developed Spring Boot RESTful applications to deliver taxpayer requested notifications through a web interface as part of TDC-ON, a subproject of IRS WebApps using ReactJS to build a modern responsive user interface.
* Externalized Spring Boot application properties to aid in maintenance and facilitate deployment across multiple environments simplifying and shortening deployment.
* Initiated a code review checklist that ensured efficient, modular & secure coding that significantly decreased testing and defect resolution time.
* Prototyped a new version of JBoss Enterprise Application Platform (EAP) and JBoss Data Grid for the ACA Verification System (AVS) with specific focus on features and capabilities that will speed up load times and allow the data layer to scale by decoupling the data layer from the application layer. Identified and documented upgrade dependencies to ensure that all upgrade prerequisites are successfully completed prior to the upgrade.
* Built JUnit test framework for the AVS application increasing unit test code coverage to 80% from 20%.

Noblis, Inc, Java/Web Developer, Sep 2016-Nov 2016

* Supported and maintained all layers of SEMS (SERDP and ESTCP Management System) application and database development, using Struts framework and JSTL as UI layer with Oracle as the DB.
* Integrated JasperReports into SEMS to provide a more robust report and data export capabilities.

MPE Government Solutions, Principal Software Engineer, Nov 2013-Sep 2016

Designed, developed and maintained MicroPact COTS tracking and reporting product to streamline process tracking, improve user experience, provide more sophisticated reporting and enhance security capabilities for the Department of Defense.

**SEMS (SERDP and ESTCP Management System) – SERDP and ESTCP are the Department of Defense’s environmental research programs.**

* Drove all phases of SDLC including requirements gathering, preliminary analysis, systems design, development, unit and integration testing, deployment and maintenance. Developed all levels of effort and regularly communicated status to management and client.
* Performed the role of solutions architect, data modeler and team lead leading a small team of developers to support the Apache Struts MVC (Model-View-Controller) project to deliver a robust and stable platform for SEMS clients.
* Implemented a robust production monitoring system from tool selection, proof of concept through implementation using JavaMelody to track response time, user activity, resource consumption and trends in the application to minimize downtime, tune system resources, and identify SQL issues.
* Refactored legacy code to provide a more responsive and modern user experience.
* Produced ad hoc reports to enable management to better understand particular aspects of the system and exposed data that was not available through the application, reducing management time to complete work from days to hours.
* Created an API to provide a feed in the required XML format to support the DoD’s annual congressional reporting requirement.

MicroPact Engineering, Inc, Senior Consultant, Apr 2003-Oct 2013

Performed Software Engineering duties on a federal IT contract supporting the Strategic Environmental Research & Development Program (SERDP) and Environmental Security Technology Certification Program (ESTCP); these are the Department of Defense’s (DOD) corporate environmental R&D, technology demonstration and validation programs that are planned and executed in cooperation with the Department of Energy (DOE) and the Environmental Protection Agency (EPA).

**SEMS (SERDP and ESTCP Management System) – SERDP and ESTCP are the Department of Defense’s environmental research programs.**

* Migrated the SEMS application from jBoss 3.0.4 to Tomcat 5.5.20, which resulted in reduced response time, lower application overhead and easier deployments.
* Redesigned the Management Reports Menu reducing time to generate and maintain reports.
* Updated and maintained SERDP and ESTCP ERD, (Entity-Relationship Diagram), helping all actors to better understand the application structure and enabled business analysts to have a better understanding of data relationships.
* Designed, developed and implemented the Contacts subsystem, a mailing list module for SEMS to facilitate user community communication and community outreach.
* Developed and implemented forms and procedures to ensure consistent, high quality deliverables, e.g. Cost Estimate for Development Work and introduced a standardized, pre-built development application structure utilizing Eclipse IDE and Ant to build scripts resulting in faster build times, and shortened new developer onboarding.
* Analyzed, recommended and implemented a version control system (subversion) to replace PVCS and issue tracking system (trac). These changes enabled concurrent work on related areas of the project, shortening development time and provided a more comprehensive view of the project and development status.
* Developed estimates for SERDP and ESTCP Management System development, assigned development tasks to other developers and verified code changes.
* Prototyped a unit and integration testing framework using JUnit, HttpUnit & JMeter.
* Refactored code to align with newer standard development technologies and techniques, JSTL, JavaServer Pages Standard Tag Library, Expression Language and JavaScript frameworks (jQuery & Prototype)

Entellitrak – A unified platform for case management and business process management

* Exposed complaint information from a legacy MySQL database to users and seamlessly performed the data migration into the client’s main database.
* Supported different verticals or products using the entellitrak framework to enforce business and security rules and provide a more dynamic modern user experience.

academic qualifications and certifications

* AA, Liberal Arts (Philosophy), Northern Virginia Community College
* Java Certification, George Mason University Train to Technology Program
* Diploma in Computer Programming, Computer Learning Center
* Appian - Appian Analyst Credential Exam [C100\_18P]