**Antwone D. Walters**  
**ROLE:** System Architect / Software Engineer (Full Stack: Frontend / Backend)  
**LOCATION:** Miami, Florida (United States East Coast Time Zone/EST)  
**ELIGIBILITY:** United States Citizen (Natural) no Visa Required  
**AVAILABLE:** Remote positions only or occasional travel  
**EMAIL:** ANTWONE@GMAIL.COM  
**LINKEDIN:** [@antwone-walters](https://www.linkedin.com/in/antwone-walters/)  
**PHONE:** (301) 693-6996 (Call or Text is fine)  
**OTHER:** Zoom/MS-Teams camera video calls/interview is fine.  
**LANGUAGES:** English (Native) - Spanish (Advanced) - Japanese (Intermediate)

### SUMMARY OF EXPERIENCE

Versatile and results-driven Full Stack Software Engineer with over two decades of experience delivering scalable, secure, and maintainable applications across government, defense, healthcare, aerospace, and commercial sectors. Skilled in building modern web applications and distributed systems using technologies such as React, Angular, Java (Spring Boot), Python (Django), C#/.NET (including Blazor), and Node.js.

Expert in backend architecture and data integration, with hands-on experience in microservices, event-driven pipelines (Kafka, RabbitMQ), and geospatial/GIS systems. Proficient in deploying and maintaining systems in AWS and Azure environments, with a strong foundation in Docker-based development and DevOps automation via Jenkins, Git, and CI/CD pipelines.

Known for quickly mastering legacy codebases, producing clean documentation, and collaborating cross-functionally with infrastructure, security, and research teams. Equally comfortable enhancing UIs, debugging backend services, or reverse-engineering undocumented systems to ensure mission-critical uptime.

### MY PERSONAL SKILL MATRIX

**🧠 Artificial Intelligence (Proficient User)** *Prompt Engineering, Code Generation, Role Simulation, Research Guidance, Completion/Refactor Assistance*

**☁️ Cloud Platforms & Infrastructure**

**Amazon Web Services (AWS):**

* *Compute:* EC2, Lambda, Elastic Beanstalk, Auto-Scaling, Load Balancing
* *Storage:* S3, Glacier, EBS, EFS
* *Networking:* VPC, Route 53, CloudFront

**Microsoft Azure:**

* Azure VM, Azure Storage, Active Directory, BizTalk

**💻 Frontend Development**

* **Frameworks & Tools:** React, Angular, AngularJS, Google Web Toolkit
* **Languages:** HTML5, CSS, JavaScript, TypeScript, ASP, JSP, PHP
* **Testing:** Cypress, Jest, React Testing Library (RTL), Mocha, Enzyme, Selenium

**🔧 Backend Development**

* **Languages/Frameworks:** Java (9+), Spring Boot, Python (Django/Flask), Node.js/Express
* **Microservices:** REST, SOAP, WSDL, GraphQL, JSON, XML
* **Databases:**
  + *Relational:* Oracle, MySQL, PostgreSQL, Aurora
  + *NoSQL:* MongoDB, DynamoDB

**📦 Containers & DevOps**

* Docker, Docker Compose, Jenkins, GitLab CI/CD, Git, SVN, CVS
* CI/CD Pipelines, Infrastructure Automation

**📱 Mobile Development**

* Android (Java), iOS (Web/C#), Xamarin
* Native & Mobile Web Applications

**🛠 Collaboration & Workflow Tools**

* Microsoft Teams, Jira, Confluence, Mattermost

### CERTIFICATIONS

* **Security+** *(DoD 8570-compliant)*
* **ITIL Foundation Certification**
* **Network+**
* **Cloud+**
* **Certified Scrum Master** *(Certification held; not an active Scrum Master, but long-time Agile team participant with some leadership exposure)*
* *Past certifications also include A+ (legacy; not actively maintained).*

### EDUCATION

* **MS Software Engineering**, University of Maryland, Grad. Fall’05
* **BS Computer Engineering**, Rochester Institute of Tech., Grad. May’01

### EXPERIENCE

**CreativeGC Consulting: Small Business Association – United States Govt Agency   
 Backend Software Engineer 11/2024 to 02/2025**Delivered backend engineering solutions for a high-visibility, public-facing federal application supporting nationwide small business initiatives.

* Implemented features and performed system maintenance using Python 3 and Django ORM with PostgreSQL (backend).
* Developed and debugged Kafka producer-consumer workflows to support real-time, event-driven architecture (backend).
* Deployed services within Docker containers and maintained service health across multi-node environments (DevOps/backend).
* Integrated backend services with AWS storage solutions for scalable data access and compliance (backend).
* Contributed to React-based frontend bug fixes and data-binding improvements in support of backend integration (frontend).

Tools/Skills Used: Python 3, Django, PostgreSQL, Kafka, Docker, AWS, React (Frontend Enhancements).

**Triple Crown Consulting: Sierra Nevada Corporation - US Army (Defense Contractor)   
 Fullstack Software Engineer 06/2024 to 10/2024**Developed and supported an interactive geospatial threat monitoring platform for military intelligence applications, contributing across both client and server layers.

* Built and maintained components of a C#/.NET Blazor web application using OpenGIS and Telerik UI libraries (frontend/backend).
* Developed SignalR-based real-time data channels to synchronize mission-critical updates between UI and backend services (backend).
* Implemented backend support for geospatial and analytical workflows, integrating with PostGIS, MongoDB, and MSSQL data stores (backend).
* Created and enhanced frontend features including charts, controls, and interactive map overlays (frontend).
* Worked in a Dockerized local environment using Visual Studio 2022, coordinating with other teams across defense-secure protocols.

Tools/Skills Used: C#/.NET Blazor, SignalR, OpenGIS, Telerik, PostGIS, MongoDB, MSSQL, Docker, Visual Studio 2022.

**Triple Crown Consulting: Innovation Optics (Scientific Research)   
 Fullstack Software Engineer 03/2024 to 07/2024**Engineered scalable, secure data platforms to support advanced security monitoring and scientific analysis pipelines. Collaborated with cross-functional teams to align software design with organizational security and research objectives.

* Led the onboarding and normalization of new data sources into SIEM ingestion pipelines, enhancing visibility and threat response capability (backend).
* Built and maintained frontend features using React 18 and TypeScript, ensuring clean integration with backend microservices and data visualizations (frontend).
* Developed microservices using Java/Spring Boot and C#/.NET, supporting scalable backend processing and system interoperability (backend).
* Designed and implemented robust logging, monitoring, and alerting solutions using the Elastic Stack (Elasticsearch, Logstash, Kibana), improving incident response workflows (backend/DevOps).
* Automated deployment pipelines via AWS and Jenkins to ensure efficient scaling, versioning, and policy compliance across environments (DevOps).

Tools/Skills Used: React 18 (Frontend), TypeScript, Java/Spring Boot, C#/.NET (Backend), Docker, AWS, CI/CD Pipelines, GIT, Elastic Stack (ELK).

**Triple Crown Consulting: S.R.C. (Defense Contractor)  
 Fullstack Software Engineer 09/2023 to 01/2024**Supported defense-grade cybersecurity efforts by stabilizing and enhancing a distributed system for threat detection, telemetry ingestion, and alerting.

* Resolved critical bugs in Python-based data pipelines to ensure timely and reliable ingestion into the security monitoring stack (backend).
* Collaborated with threat analysts to validate SIEM rules, ingestion mappings, and response triggers under simulated attack conditions (backend).
* Delivered frontend improvements and finalized UI features using React 16, ensuring accurate display of security metrics and system states (frontend).
* Integrated C#/.NET backend APIs and services with frontend and data layers, focusing on secure data access and proper interface binding (backend).
* Utilized Git for version control, Jenkins for CI builds, and Azure services for deployment, environment provisioning, and monitoring.

Tools/Skills Used: React 16 (Frontend), Python (Backend), C#/.NET (Backend), GIT, Azure, Jenkins.

**Triple Crown Consulting: S.P.X. (Defense Contractor)  
 Fullstack Software Engineer 11/2022 to 04/2023**Served as the sole engineer responsible for stabilizing and documenting a legacy mission-critical system used in defense operations, ensuring continued functionality, maintainability, and readiness for modernization.

* Investigated undocumented codebases and restored broken functionality across a legacy Java 1.8 web application hosted in Apache Tomcat (backend).
* Implemented bug fixes and enhancements in AngularJS and HTML interfaces for improved usability and reliability (frontend).
* Integrated and validated data flow between the application, AWS AuroraDB (PostgreSQL-compatible), and RabbitMQ messaging queues (backend).
* Authored comprehensive documentation from scratch, reverse-engineering application logic, deployment workflows, and inter-service dependencies.
* Performed Linux-based server administration and Tomcat configuration to support system stability, patching, and deployment (backend).
* Wrote Python utilities to support maintenance tasks and environment automation (backend utilities).

Tools/Skills Used: AngularJS (Frontend), Java 1.8 (Backend), HTML, Python, JavaScript, Linux, Tomcat Server Administration, AWS AuroraDB, RabbitMQ.

**LanceSoft Consulting: Lockheed Martin Aerospace (Defense Contractor)   
 React / Java Software Engineer 10/2021 to 04/2022**  
Contributed to the development of a modern aerospace application platform, delivering features that enhanced user experience, data workflows, and service reliability within secure defense environments.

* Implemented interactive UI components and feature enhancements using ReactJS, ensuring responsive design and adherence to usability standards (frontend).
* Developed backend microservices with Spring Boot and Java 9 to support business logic, secure data handling, and system integration (backend).
* Designed RESTful APIs and coordinated contract definitions between frontend and backend teams (backend).
* Integrated frontend applications with backend services, performing validation and troubleshooting across the full stack (frontend/backend).
* Used Git for source control, Maven for dependency management, and Microsoft Teams for daily collaboration and Agile delivery.

Tools/Skills Used: ReactJS (Frontend), Spring Boot, Java 9 (Backend), GIT, Microsoft Teams, Maven Repositories.

**Triple Crown Consulting: A.R.A. (Defense Contractor)  
 Fullstack Software Engineer 02/2021 to 11/2023**Designed and implemented secure, multi-tier software solutions supporting advanced SIEM (Security Information and Event Management) capabilities for military-grade threat monitoring and incident response.

* Developed reusable ReactJS components and UI workflows for real-time threat visualization, system health dashboards, and data source management (frontend).
* Built and maintained Spring Boot and Java-based backend services for log ingestion, event correlation, and alert rule processing (backend).
* Authored Node.js scripts and CLI tools to automate configuration management, proxy settings, and system diagnostics (backend utilities).
* Engineered and validated onboarding pipelines for telemetry sources, supporting structured/unstructured log formats and parsing logic (backend).
* Configured secure HTTP proxy endpoints for controlled communication between distributed infrastructure and centralized SIEM (backend).
* Leveraged Docker to containerize backend services and support cross-environment deployments and testing.
* Practiced Agile methodologies, using Jira for sprint tracking and Microsoft Teams for collaboration in a distributed devops environment.

Tools/Skills Used: ReactJS (Frontend), Java/Spring Boot (Backend), Node/NPM (Backend Utilities), Docker, JSON, Jira, Microsoft Teams.

**Bigr.io Consulting: American Well Corporation (Healthcare Company)   
 Fullstack Software Engineer 07/2020 to 02/2021**  
Developed and maintained a secure telehealth platform supporting real-time patient-provider interactions across web and mobile environments.

* Built responsive Angular 9 web interfaces with HTML5, CSS/SASS, and TypeScript for both desktop and mobile-web (frontend).
* Integrated real-time appointment scheduling, chat, and video modules for cross-platform usability on iOS and Android (frontend).
* Designed and implemented backend microservices using Spring Boot and Java, managing patient data, appointment lifecycles, and clinical workflows (backend).
* Deployed and monitored services within AWS infrastructure, ensuring HIPAA-compliant handling of healthcare data (backend).
* Employed Node/NPM tooling for frontend module bundling, testing, and CI support (frontend).
* Worked closely with product teams and medical compliance officers to meet performance, usability, and security goals.

Tools/Skills Used: Angular 9 (Frontend), HTML5, CSS/SASS, Node/NPM, TypeScript, Java/Spring Boot (Backend), AWS.

**Carlton National: DCS Corporation (Defense Contractor)   
 Full Stack Software Engineer** **05/2019 to 04/2020**  
Contributed to the transformation of a legacy desktop application into a scalable Angular-based SPA with modern .NET microservices architecture.

* Built responsive UI components using AngularJS to provide real-time interactivity and form handling (frontend).
* Developed .NET/C# backend microservices, leveraging the Active Record ORM pattern for efficient database operations and model logic encapsulation (backend).
* Designed RESTful APIs to bridge new frontend workflows with legacy data and authentication systems (backend).
* Configured and deployed backend services to IIS servers, supporting both development and staging environments (backend).
* Collaborated with cross-functional teams using Git and Subversion for source control, and Jenkins + Azure DevOps for CI/CD pipelines.
* Employed Node/NPM for frontend asset management and task automation.

Tools/Skills Used: AngularJS (Frontend), .NET/C# with Active Record (Backend), Node/NPM, IIS, Subversion, GIT, Microsoft Teams, Jenkins, Azure DevOps.

**Carlton National: Harris Corporation (Defense Contractor)   
 Senior Software Engineer** (JENM Project) **08/2017 to 03/2019**  
Modernized a critical military network management system (JENM), migrating from a legacy Java/JavaFX platform to a scalable, web-based architecture using React and reactive Java microservices.

* Enhanced and maintained a legacy JavaFX and J2EE-based desktop and web application supporting secure network provisioning (frontend/backend).
* Led the development of a modern ReactJS/Redux frontend to replace and streamline outdated UI workflows (frontend).
* Designed Spring Boot microservices using Java 1.8 with reactive programming techniques (Reactor/CompletableFuture) for asynchronous processing and real-time feedback (backend).
* Created and maintained XML data models, leveraging XSLT transformations for device configuration generation and communication standards (backend).
* Transitioned legacy SOAP services to more modular, maintainable REST APIs within a Spring Boot framework (backend).
* Bridged legacy logic using Google Web Toolkit (GWT) during phased replacement and component decoupling (frontend).
* Utilized Node/NPM toolchains for frontend bundling, testing, and CI integration.

Tools/Skills Used: ReactJS/Redux, JavaScript ES6, Node/NPM, Java 1.8, Spring Boot, JavaFX, Reactive Programming, XML/XSLT, Google Web Toolkit.

**Carlton National: HIREology (Commercial Company)   
 Senior Software Engineer** **03/2018 to 12/2019**  
Worked as a full stack engineer on a high-traffic commercial hiring platform, contributing to both customer-facing features and backend service logic in a modern cloud-based environment.

* Developed dynamic and responsive frontend interfaces using ReactJS and Redux, enhancing UX and user workflows across hiring portals (frontend).
* Implemented and maintained backend APIs and business logic using Ruby on Rails, supporting authentication, analytics, and multi-tenant architecture (backend).
* Utilized NodeJS tooling and build processes to streamline frontend pipeline and shared services (frontend/backend).
* Integrated with PostgreSQL for data modeling and reporting, and deployed features to AWS-based infrastructure (backend).
* Participated in Agile sprints, peer code reviews, and cross-functional feature planning alongside product and QA teams.

Tools/Skills Used: ReactJS/Redux, NodeJS/NPM, Ruby/Rails, PostgreSQL, AWS.

**Wyle Laboratories: United States Navy (Defense Agency) - SSAR Project  
 .NET Sr Software Engineer 05/2017 to 12/2019**  
Served as the sole engineer responsible for maintaining, enhancing, and deploying a .NET-based web application supporting strategic Navy systems under the SSAR initiative.

* Developed and maintained ASP.NET Web Forms and MVC components for interactive, role-based user interfaces (frontend).
* Implemented and optimized backend logic using C#, Entity Framework, and MS-SQL Server for data-driven functionality (backend).
* Managed IIS server configuration and application deployment, ensuring secure and stable hosting environments.
* Conducted code maintenance, bug fixes, and enhancements independently while handling support escalations and system documentation.
* Integrated Azure DevOps workflows for version control and deployment pipelines, and maintained legacy compatibility through Subversion syncing as needed.
* Used Visual Studio 2019 as the primary development environment across all tiers.

Tools/Skills Used: C#, ASP.NET, .NET, IIS, MS-SQL SERVER, Entity Framework, Subversion, Azure DevOps, Visual Studio 2019.

**Wyle Laboratories: United States Navy (Defense Agency) - JKCS Project  
 Java Software Engineer** **08/2016 to 08/2017**  
Served as the sole developer and maintainer of a secure web application supporting naval logistics and coordination under the JKCS initiative.

* Designed and maintained Java servlet-based architecture with JSP-driven UI components for user interaction (frontend/backend).
* Implemented SOAP web services with WSDL, XML, and JAXB to facilitate structured communication with external systems (backend).
* Utilized Java-RPC and XSLT to transform and route data through standardized formats and Navy-mandated schemas (backend).
* Ensured continuous uptime, security patching, and full-cycle support without a dedicated team—managing both development and production issues.
* Built and maintained with Java 1.8 for robust compatibility and performance.

Tools/Skills Used: Java 1.8, JSP, Servlets, SOAP, XML, XSLT, WSDL, JAXB, JAVA-RPC.

**CISCO Systems: United States Army (Defense Agency)  
 Full Stack Software Engineer** **11/2014 to 03/2016**  
Engineered a secure, enterprise-scale web application to support mission operations and data workflows for the U.S. Army.

* Developed backend services using Node.js, Express, SailsJS, and WaterlineJS ORM for scalable RESTful APIs (backend).
* Built dynamic frontend components using AngularJS and JavaScript ES6 to enable responsive UI and real-time interaction (frontend).
* Integrated with OracleDB to manage complex military data schemas and transactional workflows (backend).
* Followed full CI/CD lifecycle with emphasis on modular design, security compliance, and unit/integration testing.
* Collaborated with Army technical leads and DevSecOps teams to ensure system integrity and performance under classified conditions.

Tools/Skills Used: JavaScript ES6, NodeJS/NPM, Express, SailsJS, WaterlineJS, AngularJS, OracleDB.

**Netizens Intelligence: FAA (Government Agency) - B4UFly Project  
 .NET Software Mobile SW Engineer** **02/2015 to 12/2016**  
Developed a cross-platform mobile application for the Federal Aviation Administration to help hobbyist drone operators determine where they could legally fly.

* Built Android and iOS mobile app features using Xamarin and C#, sharing logic across platforms (frontend/backend).
* Integrated LiteDB for lightweight local data persistence and caching (backend).
* Connected mobile clients to Java/J2EE backend services deployed in AWS for real-time airspace data and geo-restriction information (backend).
* Developed map-based user interfaces with interactive overlays and alerting for airspace restrictions (frontend).
* Ensured high usability and compliance with FAA security and UX guidelines across all supported devices.

Tools/Skills Used: .NET/C#/Xamarin, Multi-Platform Android & iOS, LiteDB, Java/J2EE, AWS.

**NEST:   
 C#/.NET Mobile Software Engineer** **07/2015 to 01/2016**  
Built a cross-platform mobile training application for a commercial organization, delivering a responsive and consistent experience across Android and iOS devices.

* Developed mobile application features using Xamarin and C# to deploy shared logic across Android and iOS platforms (frontend/backend).
* Integrated with MySQL database for user data, content synchronization, and performance tracking (backend).
* Implemented mobile-friendly UI/UX tailored for training workflows, with adaptive layouts and offline caching (frontend).
* Ensured cross-platform compatibility and reliable performance through extensive mobile testing and device profiling.

Tools/Skills Used: .NET/C#/Xamarin, Multi-Platform Android & iOS, MySQL DB.

**Trusted QA: United States Air Force (Defense Agency)  
 Full Stack Java/J2EE Web Developer** **05/2015 to 08/2015**  
Modernized and maintained a legacy military web application, enhancing performance, maintainability, and readiness for Spring Boot service migration.

* Developed full-stack features and enhancements using Java 1.7, Spring Framework, and Hibernate (backend).
* Contributed to modularizing legacy components in preparation for Spring Boot service refactoring and microservice isolation (backend).
* Maintained and extended existing JSP/HTML-based UI logic for secure, form-based interactions (frontend).
* Refactored backend logic into more cohesive, controller-based structures, anticipating eventual transition to Spring Boot REST APIs (backend).
* Worked with OracleDB and Hibernate to streamline data access and reduce query latency (backend).
* Maintained compatibility with Struts while abstracting reusable components into Spring-compatible architecture.

Tools/Skills Used: Java, J2EE, Spring Framework, Spring Boot (modularization prep), Struts, HTML, Hibernate, JSP, OracleDB.

**Cornet Engineering: United States Army (Defense Agency)  
 Senior Software Engineer** **10/2014 to 07/2015**  
Developed web and mobile systems to modernize military communications, replacing legacy desktop software and enabling secure voice and video functionality in the field.

* Built a web application using Google Web Toolkit (GWT) and Spring Framework to replicate and enhance the capabilities of a legacy desktop system (frontend/backend).
* Engineered Android mobile applications to support VoIP and video communication features integrated with Asterisk PBX systems (frontend/backend).
* Conducted field-oriented testing and iterative development in coordination with end users and military tech stakeholders.
* Ensured compatibility with Army IT infrastructure and compliance with military-grade security protocols.
* Java 1.7 and early 1.8 were used throughout backend and mobile development phases.

**CACI: Department of Justice & Drug Enforcement Agency (Government Agency)  
 Software System Engineer** **02/2010 to 10/2014**  
Led full-stack development efforts across mobile, web, and backend platforms to support mission-critical operations for federal law enforcement agencies.

* Designed and developed secure Android applications for Department of Justice field agents, optimizing performance and UX for field conditions (frontend).
* Engineered backend RESTful and SOAP-based web services for secure communication across internal DOJ and DEA systems (backend).
* Migrated legacy ColdFusion systems to modernized .NET/C# and Java architectures, improving maintainability and performance (backend).
* Contributed to cross-platform service design and API standardization using WSDL and service contracts (backend).
* Supported database integration and security compliance within federal frameworks.
* Java development was conducted primarily in versions 1.6 and 1.7, with emphasis on enterprise service and mobile interoperability.

**L-3 Communications: U.S. Navy - Office of Naval Intelligence, ONI (Defense/Intelligence Agency)  
 Senior Software Engineer** **12/2007 to 02/2010**  
Developed scalable, modular J2EE web applications and data indexing systems to support mission-critical intelligence workflows and visualization platforms for ONI analysts.

* Built web applications using Spring Framework, Hibernate, and EJBs for enterprise-level data processing (backend).
* Developed dynamic client-side interfaces with Google Web Toolkit (GWT), integrating Lucene search for rapid data indexing and retrieval (frontend/backend).
* Implemented Java Swing-based components for desktop-style intelligence tools (frontend).
* Created Groovy scripts to simplify middleware logic and automate backend tasks (backend).
* Processed and transformed content using XSLT and RSS feeds to enhance data visualization (backend/frontend).
* Maintained robust Unix shell scripts for automation and deployment in secure environments.
* Java 1.5 and 1.6 were primarily used throughout this period for both UI and backend work.

**Keane Engineering: Defense Intelligence Agency, DIA (Defense/Intelligence Agency)  
 Software Engineer Team Lead** **05/2007 to 12/2007**  
Directed the design and development of secure, service-oriented web applications to support intelligence operations, while mentoring developers and ensuring best practices in a fast-paced classified environment.

* Led team-based implementation of Java J2EE applications, incorporating Spring, Hibernate, JSP, and Servlets (backend).
* Developed SOAP-based web services using WSDL, Apache Axis2, and JAX-RPC to support interagency system integrations (backend).
* Integrated Google Web Toolkit (GWT) for modern frontend development with asynchronous data handling (frontend).
* Contributed to legacy system extension via PHP scripts where applicable (backend).
* Oversaw sprint planning, code reviews, and collaborative troubleshooting across team units.
* Primary Java versions used: 1.5 and early 1.6 for enterprise middleware and service components.

**SAIC / ITT : National Geospatial-Intelligence Agency, NGA (Intelligence Agency)  
 Senior Software Engineer** **10/2004 to 05/2007**  
Built secure and scalable web-based tools to support geospatial intelligence workflows and product management for image analysts.

* Developed and maintained Java-based web applications using JSP and Servlets to manage analyst products (backend).
* Implemented AJAX-enhanced interfaces to streamline complex UI interactions and improve analyst productivity (frontend).
* Engineered and deployed load-balanced server configurations to ensure high availability and performance (backend).
* Authored and maintained Unix shell scripts to support build automation and environment configuration.
* Collaborated closely with a cooperative agile development team to ensure quality delivery across evolving requirements.
* Java 1.4 and 1.5 were used during this period for both backend services and UI logic.

**Integrity Applications : National Geospatial-Intelligence Agency, NGA (Intelligence Agency)  
 Software Engineer** **07/2003 to 10/2004**  
Delivered high-performance analytic tools and employee data systems in support of intelligence operations and internal knowledge management.

* Developed a GUI-based radar point positioning application using Java Swing for data visualization and analyst interaction (frontend).
* Designed and implemented web services supporting a knowledge tree employee information system using ASP.NET and C# (backend).
* Integrated PostgreSQL as a backend datastore for structured data access and retrieval (backend).
* Tuned and tested application performance in a High Performance Computing (HPC) environment.
* Work conducted primarily in Java 1.4, transitioning toward Java 1.5 for enhanced features and tooling.

**Wyle Laboratories : United States Navy (Defense Agency)  
 Software Engineer** **02/2002 to 07/2003**  
Led full lifecycle development of embedded systems and signal processing tools for Navy communication and hardware testing platforms.

* Programmed TCP/IP socket-based applications in Java and C/C++ to enable inter-process and cross-device communication (backend).
* Designed and developed GUI components to monitor and control embedded systems (frontend).
* Implemented and tested digital signal processing (DSP) logic, including VHDL coding for FPGA-based hardware integration (backend).
* Built out complete systems from initial requirements gathering through hardware setup, coding, and functional testing.
* Deployed and tested applications on Red Hat and Mandrake Linux environments using custom shell scripting and automation.
* Java development focused on networking and low-level control using Java 1.4.

**Heron Systems : United States Navy (Defense Agency)  
 Software Engineer** **11/2001 to 02/2002**  
Delivered simulation and productivity tools to support avionics testing and internal operations for Navy engineering teams.

* Designed and implemented a Multi-Function Control Display Unit (MFCDU) simulator using Java Swing/AWT for cockpit interface testing (frontend).
* Developed a prototype web-based time card tracking system to streamline internal reporting processes (frontend/backend).
* Wrote Java Native Interface (JNI) methods in C to bridge low-level system libraries and Java applications (backend).
* Collaborated with stakeholders to gather vendor quotes and clarify technical requirements for system components.
* Environment primarily used Java 1.3/early 1.4 for GUI and backend logic.

**Northrop Grumman : United States Air Force (Defense Agency)  
 Software Engineer** **06/2001 to 11/2001**  
Contributed to the development of internal enterprise tools and public-facing applications supporting operational infrastructure for the USAF.

* Developed Java EE web applications using EJB, JSP, Servlets, and JDBC (backend).
* Designed and maintained internal intranet portals with HTML and media assets (frontend).
* Integrated Oracle backends using PL/SQL and LDAP for secure data access (backend).
* Utilized Photoshop, Dreamweaver, and Flash for UI design elements (frontend).
* Created scripts in Perl and PHP to support internal automation and data tools (backend).
* Environment based on Java 1.3 transitioning into 1.4.