MATT ANDERSON
SENIOR SOFTWARE ENGINEER

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An experienced software engineer specializing in full-stack web development and big data/cloud computing.

Skills

Design
Able to engage customers, understand requirements, architect systems, and write technical documents.

Development
Proven results designing, building, and shipping a variety of web and mobile applications.

Deployment
Experienced using CI/CD to build containerized applications running on cloud platforms.

Technical

Design	Development	Deployment
C#, Python, Go, Scala, Java	Bootstrap, React, Angular	Hadoop, HDFS, Spark, Neo4j
JavaScript, TypeScript, Node	D3, Leaflet, CSS, HTML	AWS, Azure, Docker, DC/OS
Postgres, SQL Server, Oracle	Git, Subversion, Jenkins	NUnit, Mocha, MSTest

Experience

Applied Information Sciences (AIS)
June 2016 - Present
Senior Software Engineer

Currently the Technical Lead on a 15-person, $2.75M project (P&E Characterization) for customers at Wright-Patterson Air Force Base (WPAFB). The success of two previous applications (Rasters, Tau) led to the addition of a third (Environmentals), with development on all three continuing on a new contract. Established relationships with customers and subject matter experts, gathered and refined requirements and features, managed sprint planning and development tasks, briefed government project managers and customers on project status, and assisted with development and integration tasks.

Technical Lead for the development of Rasters, a $1M project to operationalize a web-based application for analyzing large geospatial data sets for a customer at WPAFB. Used Angular, Python, Postgres, Docker, and a DC/OS-based solution for running algorithms on raster images. Worked with customers, gathering requirements, and managing the project plan and tasking and developed a metadata extractor and implemented the integration between Rasters and the enterprise search repository.

Technical task lead for Tau, an AngularJS web application developed for an R&D customer at WPAFB. Demonstrated the ability to visualize weather and environmental data by rendering GeoTIFF images directly in a web browser. Built a metadata extractor in Go to load GeoTIFF metadata into ElasticSearch and a backend API in Python to retrieve records from ElasticSearch and images for display in the web application user interface.

Redesigned a geospatial image analysis system at WPAFB to support large-scale data storage and parallel processing using Spark, HDFS, and HBase. Investigated, benchmarked, and prototyped strategies for storing and querying millions of images and associated metadata and incorporated those results and lessons learned into a new version of the system's backend API.

Northrop Grumman
February 2013 - June 2016
Software Engineer 3

Senior software engineer responsible for ongoing development of a textual, audio, and visual data collection, processing, and analysis system used at Wright-Patterson Air Force Base.

Built a new user interface in React.js and Redux to replace the existing Silverlight front-end. In addition to supporting present functionality, the new interface will incorporate recently developed tools for mapping geospatial data and displaying data visualizations using Leaflet, D3, and a Neo4j graph database.

Architected and built the user interface for a browser-based search application in React/Redux. The application has been extremely well-received for increasing the exposure of the indexed data across the organization and is scheduled for imminent release to the production floor.

Spearheaded team-wide adoption of numerous best practices, including automated unit and

integration testing, automated builds, continuous integration, and usage of recommended design patterns.

Led development projects to implement and integrate the following features and technologies: speech enhancement, language identification, and voice activity detection; geospatial and temporal search and display capabilities; and ingestion and analysis of XML data from external systems. Added support for new mission types, standardized tasks, an RSS feed, and a REST service to ingest data from external systems into a workflow management system.

F & P America
Senior Supervisor

October 2012 - February 2013

Led a team of three direct reports and two indirect reports comprising the Information and Technology Services department. Responsible for IT needs of a 24/7 manufacturing facility, including network and server maintenance, software development projects, and end-user support. Assisted with long-term strategy, budgeting, and personnel decisions. Project manager for SolarSoft ERP and CEBOS trouble report system implementations.

The Reynolds and Reynolds Company
Supervisor (May 2010 - October 2012)

June 2007 - October 2012

Managed a team of six developers across multiple platforms, including iOS/iPhone development, corporate web applications, internal benefits enrollment, document solutions, sales support, and inventory tracking. Mentored two new hires who were subsequently nominated for department- and company-wide rookie of the year awards.

Successful projects included an iPhone GPS application, mobile version of corporate support site, new customer billing portal, custom enterprise inventory management system, implementation of an automated build and deploy process, upgrade of existing applications to .NET 2.0 to 4.0, responsibility for SiteMinder and IdentityMinder access management systems, and ongoing maintenance and support of corporate web applications.

Application Developer (June 2007 - May 2010)

Created a portal framework to display customer support applications as well as a billing application to display customer data and invoices within the portal, enabling migration away from SAP technology. Developed marketing registration sites to facilitate corporate event scheduling and planning, working closely with the events marketing team. Coordinated with corporate and brand marketing to redesign the company website to match new corporate brand standards and added dynamic, database-driven applications. Implemented a custom benefits enrollment system, which replaced a vendor-provided solution, saving tens of thousands of dollars in licensing costs.

Mentored two remote associates as they transitioned from a support roles to development positions. Awarded Software Development Rookie of the Year and nominated for the same company-wide award in November 2007 after only five months of employment. Received a Rising Star award, nominated for company-wide Associate of the Year in November 2009, and was promoted to Supervisor in May 2010.

Education   Lawrence Technological University - Southfield, Michigan
Bachelor of Science in Computer Science
Lambda Iota Tau Honor Society, 4.0 GPA

Clearance   TS/SCI