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
Experience building and deploying from source control and managing production servers.

Technical

C#, Scala, Java, Python	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)
Senior Software Engineer — June 2016 - Present

Built an open source web application for viewing and animating tiled image pyramids over a date/time range using Angular, OpenLayers, and Node.js.

Co-authored modern web application architecture and development best practices guide for distribution inside and outside of AIS.

Currently re-architecting a geospatial image analysis system at Wright Patterson Air Force Base (WPAFB) to support large-scale data storage and parallel processing using Spark, HDFS, Parquet, 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.

Leading a separate project at WPAFB to build a user interface in Angular that connects to existing infrastructure and data stores to visualize weather and environmental data.

Northrop Grumman
Software Engineer 3 — February 2013 - June 2016

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.

Currently building 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.

Athletes In Action
Information Technology Department
November 2006 - June 2007

Began development of contact management web application from existing Microsoft Access front-ends to enable users to access data remotely, add additional functionality, and simplify future upgrades. Developed event management component for inclusion in contact management application. Provided occasional help-desk support to end users.

Northwestern Mutual Financial Network
Financial Representative
August 2005 - November 2006

Operated a financial services practice, providing insurance and investment products. Met with prospects and clients to discuss their personal and financial goals, understand their needs, recommend strategies to help them achieve financial security, and challenge them to take action. Nominated for Emerging Leaders Program.

Athletes In Action
Information Technology Intern

Summer 2005

Responsible for development of www.aiagear.com storefront web site. Modified out-of-box software to suit specific needs for www.aiagear.com, including accepting staff account payments.

Education

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

Clearance

TS/SCI