Richard Tillis

FullStack Software Developer

Technical Proficiencies

Languages Java | JavaScript | PHP | TypeScript | SQL

Frameworks Angular | Ionic | AngularJS | Spring

Databases MySQL | Oracle | MS SQL Server | Firebase

Servers / Platforms Apache HTTP | Tomcat | JBoss Wildfly

Version Control Git | CVS | SVN

Education

Master of Science, Software Engineering (2014)

Bachelor of Science, Information Technology (2005)

Arizona State University
University of Phoenix

Side Projects

RSL-AZ Soccer Android & iOS App - (Architect / Developer / Maintainer)

2017 - Present

Ionic | Angular | Android | iOS | Firebase | Facebook API | Google API | Firebase Cloud Messaging

Mobile app for one of Southern Arizona's largest youth soccer tournaments. Over 1,500 app users in 2019. The app manages +350 teams' schedules, opponents, game locations, as well as tournament news and results.

Reporting Web App - (Architect / Developer / Maintainer)

2019

Angular | PrimeNG | Java | Spring Boot | Node | Tomcat | Apache | Eclipse BIRT | MS SQL Server

Built a financial reporting system for a prominent law firm in Southern Arizona. The system included an Angular web app hosted on a Node server, RESTful web services and Cron scheduling (for emailing) using Spring Boot, and a Java EE report server, including a handful of reports using Eclipse BIRT, Tomcat, and Apache HTTP giving the firm a maintainable and extendable self-service and scheduled reporting solution.

Career Progression

Learning A-Z Tucson, Arizona 2015 - Present

Leading provider of digital K-6 literacy resources. 13M+ student users, 500,000+ classrooms, 175+ countries.

Senior Software Engineer

2018 - Present

Responsible for designing, developing, and maintaining mid-sized customer-facing projects

AngularJS | JavaScript | PHP | MySQL | Linux

- <u>Leadership</u>: Primary point of contact for code reviews for the 4 Tucson engineers
- <u>Leadership</u>: Taught and supported AngularJS development. Provided training, guidance, best practices, and experiences to teammates developing in the framework.
- Application Development: Developed a quantitative student assessment reporting solution valued at \$3M+ in account renewals. I was tasked to design, build, and deploy a solution and integrate it into the existing reporting system. The high complexity of the existing system resulted in difficulty maintaining it. I introduced a simplified design for the new feature by passing virtually all the complexity from the frontend and middleware into an Open Source library specifically designed for reporting. This solution integrated seamlessly into the existing architecture, reduced complexity, increased maintainability, and provided an architectural model to refactor the existing infrastructure.
- Application Development: Architect and developer of a resource planning and scheduling web app. The project sponsors required a solution to schedule and manage project requirements and staff availability. I designed and developed every aspect of the app from the MySQL database schema, the PHP middleware (REST services, controllers, services, models, and DAOs), as well as the entire AngularJS frontend. In the end the app was able to describe project schedules, resources allocated, and task completion through designed charts, lists, and grid reporting exports.

Learning A-Z (Con't) Tucson, Arizona 2015 - Present

Software Engineer 2015 - 2018

Responsible for designing, developing, and maintaining small-sized internal projects

Java | Spring | PHP | JSP | MySQL | Apache | Tomcat | Salesforce API | Linux

- <u>Interface Development</u>: Developed a Java-based solution to synchronize 3M+ data records daily between the internal customer service system and the Salesforce CRM sales platform.
- <u>Security</u>: Updated Java 6 TLS 1.0 to 1.2. Integrated and rerouted all java-based outbound connections through an open-source library built to support Java 6.
- System Design: Designed scalable customer accounts schema, merging multiple data systems together.
- Web Services: Developed a customer-facing RESTful Pricing API library.
- <u>Leadership</u>: Salesforce API and system integration subject matter expert.

Raytheon Company Tucson, Arizona 2002 - 2015

Major US defense contractor with manufacturing concentrations in military weapons and commercial electronics.

Senior Software Engineer

2010 - 2015

Java | Oracle PL/SQL | JBoss Seam | JBoss AS | Ajax | JSF | XML | BIRT

Full-stack developer of multiple JavaEE / Oracle web apps. Developer of an FAA web app serving 250+ users. Also a developer of a shop-floor web-based system supporting 3 major Naval weapon systems.

- Application Development: Developer and team member of a Java based web app serving 250+ users.
- <u>Application Development:</u> Developer and team member of a Java based shop-floor web app supporting 3 major Naval weapon systems.
- Change Mgmt: Completed 500+ change requests supporting business strategies & customer goals.
- Business Intelligence: Developed and maintained over 100 BI reports for 5 projects.
- Performance Improvements: Reduced web application heap memory by 40%.

Software Engineer 2008 - 2009

Java | Oracle PL/SQL | MS SQL Server | .Net | WIN2K

Manager of the customer's shop floor system. Accountable for system interfaces and server maintenance.

- <u>System Design</u>: Defined complete business process requirements and system design specifications for a missile maintenance development project.
- System Development: Designed and developed an ETL process for a data migration project.
- System Interfaces: Maintained system interfaces with multiple SAP and internal configuration systems.