

PRINCIPAL ARCHITECT

iOS mobile apps / Enterprise architecture with Java/Scala/Groovy experience

An avant-garde Java Architect with a Smalltalk background, I specialize in developing frameworks, APIs, large-scale infrastructures and distributed applications in challenging environments. My current passions include Groovy and Scala on the server, and iOS application development using Objective-C.

Some of my key skills include...

- ❑ Identifying and leveraging the best of emerging (mostly open source) technologies and tools
- ❑ Developing frameworks that encapsulate best practices and the highest consistent standards
- ❑ Building systems that are scalable and expandable
- ❑ Troubleshooting and fixing problems that no one else can fix

I have a MSc in Computer Science (1990) from University of Twente, the Netherlands, and am a published author. Currently enrolled in a machine learning class at Stanford (remote).

I am a United States citizen.

Technical Proficiencies:

Java, Groovy, Scala, Objective-C, XCode, Eclipse (including developing plugins for it), XML/XSLT, REST (JAX-RS with Jersey), Spring framework, JPA and Eclipselink, Javascript and Ajax, JAXB, Maven, JUnit, Smalltalk.

Selected Accomplishments

Revitalized the DST Health Solutions business by developing a iPad/iPhone app that delivers operational reports to executives and their customers alike. In addition to the reports it also has a sophisticated alert system with customizable subscriptions so the users do not actually have to look at the reports until they are alerted that some data went outside accepted parameters. Dashboards are for the paranoid... The system will send a push notification or email when this happens. DST Health solutions measures contractual SLAs and other data using this system and the customers get a level of transparency unheard of in the industry.

Built own code generator. A Perot Systems client needed to send only differences between two complex object graphs over the wire, requiring extremely tedious code. Generated code is faster than reflection, so built a code generator that generated all main objects and the entire domain model, including behaviors we could not have written manually. This also gave us an undo redo facility on the server. Wrote a paper "Metadata Driven Multi-Artifact Code Generation Using Frame Oriented Programming", which was published in the OOPSLA 2002 workshop titled "Generative Techniques in the Context of Model Driven Architecture" (can be found here: <http://www.volantec.biz/Metadata-driven.pdf>). Cited by at least seven other publications.

Career History

CTO, Volantec.biz, 2010 to Present.

Developed an iPhone app called *iDefer* for reminders with a sophisticated scheduling feature. Has a unique 'programmable snooze' feature. *iDefer* is currently in the Appstore, though since

iOS5 it is somewhat obsolete since iOS 5 has a built-in reminder app (but that one has no advanced scheduling features at all).

Principal Architect, DST Health Solutions July 2010-Present.

DST Health Solutions is the largest medical claims outsourcer in the USA. I work in the Knowledge Management Office as both the mobile application architect as well as one of several server side architects. Responsible for all iPad/iPhone development as well as the REST services on the server side feeding data to those apps. On the server side I also work on a data virtualization layer using Teiid and rules using a Complex Event Processor (Esper). The iOS app is a universal app presenting a UI appropriate for the device it runs on (iPad and iPhone). You can find screenshots in the app store by searching for *DST Platypus*. The app displays remotely generated operational reports, receives alerts for operational data based on user created subscriptions and integrates with the issue tracking system so customers can enter support tickets and monitor progress on those tickets from within the app. The app is written in Objective-C, and leverages the Cocoa UI frameworks and Core-Data for local storage. I use the ASIHTTPRequest library for communication with a REST service on the server.

Principal Architect, DST Health Solutions July 2005 to July 2010.

Worked in the Strategic Investment Group (SIG) on several projects varying from a persistence framework using JPA and Eclipselink to RESTful web services using JAX-RS and Jersey to domain specific projects related to the industry such as provider pricing and product design. The persistence framework supports automatic database auditing, result set sorting, pagination and effective dating. The REST framework delivers this data to (browser based) clients using AJAX and the YUI user interface toolkit from Yahoo. It supports what is often referred to as HATEOAS (Hypermedia as the Engine of Application State).

Consultant, Volantec.biz, 2004 to 2005. **For IBM:** worked on Eclipse based development tools for VoiceXML applications. These were developed in the **Rational Application Suite** and later **contributed** as the vtp Eclipse project at eclipse.org.

Earlier: IT Specialist: EDS/VHA Partnership building HL7 Messaging Infrastructure for Java services and applications; and **Infrastructural Modeler / Architect: Perot Systems (now Dell)**. Various client projects included Customer Support Application for a mutual fund company – built a Visualworks-like UI toolkit in early Java to enable rapid UI development; **Product Planning and Distribution** application for a retailer – using Gemstone application server and OO database, **saving the client millions of dollars** in wasted inventory; Catalog Management System for an internet startup – built an **ontology management system** on Gemstone; HIPAA clearing house for a very large hospital chain, automatically translating medical claims from UB92 to EDI and scrubbing them of errors and submitting them to Medicare using code generation and Vitria workflow.