

MBTA-Specific Summary

Accomplished Senior Software Engineer with 15+ years of experience across financial, educational, and civic technology domains. Experienced in Java, Spring Boot, TypeScript, AWS, and CI/CD pipelines with readiness to contribute to the MBTA Technology Innovation Division. Combines rigorous systems engineering with research in applied mathematics and information theory, emphasizing data integrity, public-sector reliability, and sustainable software design.

Francisco Revelles

Summary

- Francisco is US Citizen and local to Boston, MA.
- Over 15 years of experience as a Java Developer with healthcare and IT industry.
- Unit and integration testing using JUnit 3.0, SoapUI plugin for Eclipse for web services, and Apache JMeter, Maven.
- Java backend, Spring Integration, Spring Cloud Contract solution, REST APIs.
- Many solutions were developed using Spring Core, Batch and Integration frameworks, Oracle database, iBatis, Eclipse, Maven and ClearCase.
- Design, implementation, and deployment of Angular front-end application.
- Development and testing Groovy DSLs using Scrum Agile methodology, Jira, XML, XSLT, Java 8, MongoDB, Tomcat 7, Subversion, Eclipse, Spring, JUnit on Linux CentOS-7 for health metric indicators.
- MySQL, PostgreSQL: query design, stored procedures, functions and views.
- Continuous Integration and Deployment using Concourse Pipelines and GitLab CI
- Design and development of applications integrated with Cognos BI for taxes reporting using JSF, Oracle and Hibernate.
- Physical architecture is a multilayer environment using JBoss Application Server 4.2 as EJB 3 container for business logic, Apache for Axis web services, Oracle 10g, hibernate for data layer; views developed with Adobe Flex technology.
- Writing Detailed Design, High Level Design and Java code for customer credit verification, deposit creation, deposit refund and customer billing account number information APIs to be used as EJB Web services through the Web Portal by Customers and CSRs for the launch of the new IPTV Service.

Skills

- JavaScript: jQuery, AJAX, Ionic, Angular, NodeJS, React.
- Java/JAVA EE: Core, EJB, JAX-RPC, JAX-WS, JNDI, JDBC, JPA.
- CI/CD: Jenkins, Concourse. SCM and build Tools: Git, Bitbucket, Maven, Gradle, Subversion.
- Cloud: AWS, Heroku, Pearson Bitesize(Hybrid AWS, GCP), Cloud Foundry.
- Containers: Docker, Kubernetes.
- Visualization: Prometheus, Grafana.
- OSs: UNIX (AIX, Solaris, BSD), Microsoft, Linux, Mac OS.
- Languages: Java, Kotlin, Groovy, JavaScript, TypeScript, C, C++, Perl, SQL, HTML, Emacs Lisp.
- Spring: Spring, Spring Roo, Spring Integration, Spring Batch, Spring Boot, Spring Cloud, Spring Security, Spring HATEOAS, Spring Cloud Contract.
- App Serv/Cont.: NGNIX, BEA WebLogic, IBM WebSphere, JBoss, Sun Application Server, Apache Tomcat.
- Databases/ORM: MySQL, DB2, Oracle, MS SQL, Toad for Oracle, Hibernate, iBatis, MongoDB. Web Services: SOA, REST API, WSDL, SOAP, BEA Tuxedo, Apache Axis2, WS-* Design: Visual Paradigm, Enterprise Architect, Rational Rose, Swagger.
- SCM and build: Git, Subversion, Mercurial, Tortoise.
- Methodology: SLDC, Waterfall, Agile: Scrum, Extreme Programming, Pair Programming, Feature Driven Development, Test Driven Development.
- ECM: Alfresco, CMIS.
- GUI: Flex, ZK, CSS, Spring Surf, JSF, Telerik Kendo UI, Ionic.
- Testing: Mercury TestDirector 8.0, HP Quality Center 9.0, Apache JMeter, JUnit, Rational Functional Testing, SoapUI, LabView, Cypress, Jest, Enzyme.
- Bug/Incident Tracking: Jira, Remedy (ISBAN), Pivotal Tracker, Clearcase.
- XML/JSON: Castor, Jackson, others.
- Schedulers: Cron, Quartz, Autosys.

Courses And Training

- AWS DevOps - Unique Systems Skills (2022)
- Data Science with Python - Unique Systems Skills (2022)
- Python – Unique Systems Skills (2022)
- Kubernetes DevNation Master Course.(2021)
- Amazon Elastic Kubernetes Service (EKS) Primer.
- AWS Cloud Practitioner Essentials: Core Services – AWS Training and Certification.

- Microservices with Spring Cloud by Ken Krueger.
- Master Java Web Services and REST API with Spring Boot by In28Minutes.
- Introducing Spring Boot by Dan Vega.
- Learn Spring Boot: Rapid Application Developer by Dan Vega.
- Introduction to AWS Identity and Access Management (IAM).
- Automate the Boring Stuff with Python Programming by Al Sweigart.
- Informatica PowerCenter Developer.
- Git Complete: The definitive step-by-step guide to Git by Jason Taylor.
- Mongo DB for Java Developers.

Professional Experience

Boulou Service – Boston, MA

October 2022 – June 2024

Java Developer/Software Engineer

- Spring Boot: web, security, maven for backend, REST API, Admin dashboard development.
- Mobile frontend(iOS/Android): Flutter: Dart, BloC Pattern..
- Design, development, integration, and testing for Boulou Service Marketplace platform: mobile, REST API and web interface, and Stripe Payments.
- AWS EC2/Lambda/Docker Containers– Linux/ Apache2.
- Spring Boot. Security + OAuth2: social authentication and REST API.
- MySQL, PostgreSQL: query design, stored procedures, functions and views.
- Platform data acquisition with Python, BeautifulSoup, Selenium, and chromedriver.

Unique Systems Skills – Boston, MA

April 2022 – September 2022

Data Science with Python/AWS/DevOps

- Microsoft Python Certificate.
- Python.
- Data Science with Python.
- AWS DevOps.

Kessel Run - Altoros – Boston, MA

May 2020 – October 2020

JAVA - Full Stack Developer

- Develop Kronos cloud-native solution to set flying and maintenance schedules for an F-35 aircraft squadron in 15 minutes instead of the weeklong process it was when done manually.
- Java backend, Spring Integration, Spring Cloud Contract solution, REST APIs.
- Frontend JavaScript ,React, React-Redux(State Management).
- JAVA Spring Boot backends.
- Git, Git-together, and Git-mob for pair programming
- Docker containers – AI solution for schedule optimization.
- Cypress, Junit, Jest, Enzyme
- Fortify, SonarQube
- Test Driven Development.
- Refactoring - Mikado Method.
- Continuous Integration and Deployment using Concourse Pipelines and GitLab CI
- Deployment on Cloud Foundry

Pearson – Boston, MA

Dec 2018-August 2019

Sr. Java Developer

- Redesign Pearson Writer application monolithic architecture as a containerized microservices architecture solution.
- Design Pearson Writer's next-generation REST API with SwaggerHub using the Open API Specification (OAS).
- Development of microservices and gateways cloud-native applications adhering to the Twelve-Factor App Methodology for building Pearson Writer's components as services modifying JHipster generated microservices applications.
- Deployment of Writer's microservices containerized solution into next-generation PAAS for Pearson's digital education Kubernetes-based cloud platform named Bitesize implementing several deployment patterns as service per instance, per host, multiple patterns using Kubernetes, Consul, Vault, Nginx as ingress Jenkins for automated build pipelines for integrating all the functionalities together.

- Deployment and access configuration of several databases as Amazon Aurora, MySQL, and MongoDB.
- Deployment of Pearson Writer microservices architecture in Pearson's hybrid-AWS platform with Kubernetes.
- Design, implementation, and deployment of Vue.js front-end application.
- Design, implementation, and deployment of Angular front-end application.
- Design, implementation, and deployments of Vue.js log-in application implementing Pearson's security.
- Design and implementation and deployment of aggregate services.

**Northeastern University – Boston, MA
Integration Developer for Mobile Development.**

Dec 2014 – July 2017

- Development of Athletics Department GoNU mobile applications with Apache Cordova/PhoneGap, NodeJS, JavaScript, XML, JSON, TypeScript, Angular I and II, Ionic, Google Maps, Geofences, iBeacons, Oracle, jQuery, OAuth 1.0, 2.0, social media APIs (Facebook, Google+, Twitter, Instagram)
- Development of web applications for mobile apps administration and integration with Groovy and Grails, GORM, GSP, Spring Security.
- Development of batch applications using Spring Boot Batch technology for mobile apps Push Notifications and package delivery among others.
- Development of PL-SQL stored procedures, functions and views to expose Banner 8.X Student module functionality as a REST API.
- Development of Live Scores web application for Athletics mobile app using Groovy and Grails, Apache Commons-Net, and Quartz.
- Android – Troubleshoot, debug and build Android builds for Cordova mobile applications.
- Visitor center – Development of Visitor Center mobile/web application using Polymer Web Components and Twilio Voice & Video SDK. Deployment into Heroku Cloud Platform.
- NUze functionality –Design and development of web application for administration of NUze functionality (messages Northeastern University administration sends to the users of NU mobile app)
- Development of Groovy and Grails application for Northeastern University NU app Survey administration.
- Course Catalogue Application – Build proof of concept and prototype with Google Polymer and Web Components frontend with a Node.js backend interfacing Enterprise services.

IHM – Institute for Health Metrics – Burlington, MA

Nov 2014 - Dec 2014

Java Developer

- Development and testing Groovy DSLs using Scrum Agile methodology, Jira, XML, XSLT, Java 7, MongoDB, Tomcat 7, Subversion, Eclipse, Spring, JUnit on Linux CentOS-7 for health metric indicators.

Nextgen Invent Corp – Marlborough, MA

Sep 2014- Oct 2014

Java Developer

- Design and development of JASCI Sign-On and Security – Implement JAAS JDBCRealm, with Apache Shiro, Java 1.7, Spring MVC, Hibernate, JSP, CSS3, Kendo UI, Oracle 11g, JBoss EAP 6.3.

Infosys – Quincy, MA

Mar 2012 – Oct 2014

Java Developer Financial Services and Insurance - Java/JAVA EE

- Design and development of solutions to feed Data Acquisition Framework with data from different data vendors.
- This solution was developed using Spring Core, Batch and Integration frameworks, Oracle database, iBatis, Eclipse, Maven and ClearCase.
- Design and development of Java components for integration of Data Reference information from Data vendors to PolarLake for exchange and processing of financial instruments (securities).
- Java 1.6, Spring Core, iBatis, Tomcat, xmlSpy, XML, XSD, Castor, ClearCase, Eclipse, SoapUI, Oracle, maven.

Santander Bank - ISBN

Aug 2010 – Sep 2011

JAVA EE Developer – ISBN USA – Sovereign Bank, Boston, MA, USA.

- Integration solutions designs for Financial Crime Control system (WizSentri) with Partenon (Cobol) and Alhambra(JAVA EE) platforms using JMS, MQ series, and mainframe technologies.
- Batch solution – Cobol (Partenon)
- Online solution – JAVA EE (Alhambra)
- Sovereign Bank transformation. Internet retail, DDR, DDS, and MDLs. Migration from Sovereign platform to Grupo Santander Partenon platform analysis, development, and testing. WebSphere Developer, Rational, Mercury Quality Center 9.0, Excel, SoapUI.
- Payments – Clear2Pay, Use Cases, DDRs, JAVA EE, Mainframe, SEPA, ACH, FOREIGN, clearing houses.

- JAVA EE analyst in national, pan European and worldwide payments (SEPA Direct Debit, SEPA Credit Transfer, International Credit Transfer), Payment Gateway and Corporate banking. JAVA EE, EJB, MDB, XPath, XQuery BPEL, JBPB, SOA, JMS, MQSeries, HOST(Mainframe), Clear2Pay, EBA, IberPay, ACH, PEP+, Foreign, SWIFT, Target 2, Internet banking USA. Automated testing with IBM Rational Functional Testing, Continuous Integration.

TDA - Madrid Spain

JAVA EE Developer

May 2010 – July 2010

- Design and development of Rich Internet Applications for new functionality and flows for asset securities constitution and management in a heterogeneous enterprise environment implementing Feature Driven Development Methodology, FDDPMA.
- Solution design in UML using Enterprise Architect, and JAVA EE technologies for SOA (Service Oriented Architecture) implementing Business Process Management with jBPM workflow engine for workflow process flows execution.
- Physical architecture is a multilayer environment using JBoss Application Server 4.2 as EJB 3 container for business logic, Apache for Axis web services, Oracle 10g, Hibernate for data layer; views developed with Adobe Flex technology.
- Unit and integration testing using JUnit 3.0, SoapUI plugin for Eclipse for web services, and Apache JMeter. Maven.

Department Of Treasury

Java Developer

Jun 2009 – Mar 2010

- Design of business process for distribution of federal incentive ARRA. Design and development and support of web applications for data validation and integration with mainframe processes using Java, Eclipse, Spring MVC, JSP, CSS, and Apache Tomcat.
- Design and development of a solution for taxpayer information gathering and collection using an ASP.NET web application as a front-end interaction with end-users. DHTML, CSS, AJAX(Telerik).

Orsys Consulting

Java/JAVA EE Developer API Development - IPTV- APILINK Team

Mar 2008 - May 2009

- Claro-PRT real-time integration implementing Service Oriented Architecture with JAVA EE technologies to connect telecom Oracle TBS M6 provisioning system with Amdocs Ensemble billing system using: Session Stateless Enterprise Java Beans, BEA WebLogic 8.1, BEA Tuxedo services, Apache Axis2 web services, Oracle, Apache Ant on Solaris systems.
- Writing Detailed Design, High Level Design and Java code for customer credit verification, deposit creation, deposit refund and customer billing account number information APIs to be used as EJB Web services through the Web Portal by Customers and CSRs for the launch of the new IPTV Service.
- APILink Testing including Unit Testing, System Testing at Amdocs, Sao Paulo, Brazil, User Acceptance Testing (UAT), Stress Testing, Regression and Integration Testing at PRT-Claro. Activity included test case execution and design using SoapUI plugin for Eclipse, TOAD for Oracle, Mercury TestDirector 8.0 and Apache JMeter. APILink knowledge transfer and support to several implementation teams like Claro Web Portal, Coqui ISP, and Provisioning M6.
- Interface Coqui.net ordering System with Amdocs Ensemble billing system. Using Java with Spring framework for IoC pattern, to call API's web services, for real time integration of Coqui.net mainframe wireline billing and mainframe's ordering system, OSADIA, with Amdocs Ensemble through APILink web services for Coqui.net and maven.
- Wireline Billing Interfaces Migration
- Detailed Interface Specifications documentation generation to describe 250 PRT wireline billing interfaces for real time integration with Amdocs Ensemble billing system. This stage describes the PRT's AS IS wireline billing interfaces.
- Sequence diagrams in UML describing all the interfaces described in Detailed Interface Specifications documentation.
- Design and development of applications integrated with Cognos BI for taxes reporting using JSF, Oracle and Hibernate.
- IPTV/DSL Model Update Interface – JAVA/Spring/Quartz.
- Development for ISP TELCO Activity Monitor Daemon Application – JAVA/Spring/Quartz.

Healthcaretek**Senior Programmer****Jul 2007 - Mar 2008**

- Design and implement an automated clearinghouse system solution for HIPAA EDI transactions using MySQL, Perl, Linux Suse 9.1.
- Application development for data extraction from EDI-X12N transactions for reporting claim acknowledgment, status and electronic remittance advice using HIPAA formats and XML technologies.

Preferred Health, INC.**Sep 2006 – Jul 2007****Java Developer**

- Design and development of web-based database applications for several reporting purposes at accounting, claims, sales, and administration departments using Java/JAVA EE, JDBC, Universe, DB2, Eclipse and WebSphere Application Developer/Rational, BIRT, UNIX AIX and IBM WebSphere Application Server.
- Design and development of web service prototypes for HIPAA X12N 270/271 EDI transactions for patient eligibility and X12N 276/277 EDI for claims status using Java, IBM WebSphere, DB2 and Axis2.
- In charge of organization, integration of the implementation of the web base Health Plan Administration System from RAM Technologies: HEALTHsuite and eHealthSuite with legacy systems.
- In charge of the Business Requirements definition, Electronic Claims and Encounters Policies and Procedures creation of the Medicare Advantage Lines of Business.

Firstpoint Health Group**Jan 2005 – Aug 2006****Java Developer**

- Development of Electronic Health Records using the Veterans Information System Technology Architecture (VistA), MUMPS, Java, and NoSQL: Caché, GTM.
- Development of several applications to create HIPAA EDI transactions (837/835/270/271/276/277)
- Design of web services prototypes for eligibility and claim status (270/271/276/277) with Java and Apache Axis.

Gauss Research Lab**Aug 1998- Dec 2004****Programmer**

- Development of several ccTLD .pr registration web applications for domain name registration, billing and reporting using VB, C#, ASP, ASP.NET, HTML with MS SQL 2000.
- Development of several applications for Information Theory Research with structures like Finite Fields, Costas Arrays, Sonar Sequences, PPMs and CDMA, on C, C++, Java and Assembly

Education

- Bachelor of Science in Computer Science University of Puerto Rico, San Juan, PR
- National Science Foundation Computer Science, Engineering, and Mathematics Scholarship Award (CSEMS) NSF 00-85