Salvador Martínez Espinosa

Software Developer.
(Java/JavaScript/TypeScript/Nodejs/React/Angular/VueJS/Nextjs/Nestjs/PHP/Python/Django/AWS/GoogleCloud)

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http://salvadormartinez50.github.io/CV/

Professional Highlights

I have been working as a Software Developer for over 4 years in different industries such as retail, hospitality, finance and government, during my work experience with Frontend and Backend development I've contributed to create and maintain web apps, working comfortably on the Backend as well as the Frontend but with a personal preference for the Backend side where I invests most of my time improving.

Technical Proficiencies

Programming	JavaScript, TypeScript,Java,PHP, Python, Object Oriented Programming(OOP), Functional Programming, Procedural Programming.
Development technologies	Nodejs, Nestjs, Nextjs, Java Quarkus, Hibernate, DAO, DTO, Modelos, Oracle DB 12.
Databases	MongoDB, MariaDB, Oracle, MySQL, SQL Server, PostgreSQL, Redis, DynamDB.
Environments	Windows, UNIX, Linux (RedHat, Ubuntu), Mac Os.
Other Skills	Spanish, English, and Portuguese language skills. , WebLogic 12c, error tracking in log, automatic and manual deployments. Installation and preparation of Java 11, 1.8 and 14 environments, Object oriented Design (OOD), MVC, SOLID, Jquery, CSS3, HTML 5, Life ray

	(CMS), Drupal (CMS), AEM (CMS), Wordpress (CMS), Spring MVC,Spring Boot, Spring Security, Microservices, XHTML, CSS3, FlexBox, SASS, JSON, JSP, JSF, AJAX, Laravel, Django, Vue.js, React.js, Node.js, Express.js, GraphQL, Prisma, Apollo Client, Jest.js, Angular, Bootstrap, Material UI, Vuetify, Next.js, Gatsby.js, AWS (EC2, Amplify, S3, RDS), Google Cloud, Kubernetes, Docker, React Native.

Relevant Experience

Software Engineer | Freelance (Nestjs/Nodejs/ Nextjs/Angular React/Java/ReactJS/VueJS/ /Python/Django/AWS/GoogleCloud)

June 2019 – Current

As a software developer at my current work, I have been responsible for the creation of Microservices with Quarkus technology, exposition of services (endpoints) Rest type GET/POST/PUT, which integrate the operation of banking insurance agents with AMIS. As well as from providing maintenance to the web stack of different companies, so my activities include fixing CSS/HTML/Handlebars issues, changing current functionality within the ReactJS components for both class and function based components, so I am experienced using these core technologies, the purpose of the fixes has been to improve accessibility concerns such as providing proper screen-reader-only messages and enabling proper keyboard navigation, improving Google Core Web Vitals performance, image optimization, CLS and LCP scores to a passing score defined by Google standards. The project involves server side rendering using Java layer so I'm familiar with rendering markup from yaml files and coding business logic using Java and WebLogic as well.

Other important aspect of my work, has been developing REST Web micro services using NodeJS, TypeScript, ExpressJS and Sequelize (as ORM for interacting with current Postgres DB). Frequently my responsibility has been to migrate functionality from the old monolithic API built in Java Spring into microservices built with Node, in that regard I am familiar with writing authorization/authentication layers using JWT's and cookies, writing CRUD operations, interacting with SQL databases, writing SQL scripts, writing unit tests for service implementation using Jest, Chai, Sinon and Mocha, writing business logic in TS implementing basic layered architecture Controller-Service-Model, validation middlewares from scratch and handling errors generated by Bad Requests or internal issues for execution in the web service, dealing and handling message queues from the message broker implemented with NATS and in general trying to improve the quality of the code by writing performant code which executes faster by experimenting with different algorithms that I find in python approaches. In this project I have been exposed to Docker and Kubernetes for building, deploying and orchestrating my microservices and with Google Cloud for kubernetes infrastructure deployment and management, so I am familiar with defining dockerfiles and yaml files for infrastructure management.

Furthermore, as a Freelance Full Stack Developer I've concentrated on developing eCommerce full stack web applications for a variety of clients, all of them small businesses selling a variety of physical products all over Mexico. In these projects I develop the whole application so for the frontend part I make use of HTML, CSS, SASS and Material UI for the UI, ReactJS for the development of frontend logic and integration of endpoints from the backend, I use functional

components and react hooks frontend logic, axios for consuming REST web services, React-Testing-Library for unit testing, React-Redux for state management and Styleguidist for component documentation. As far as backend development is concerned I work with TypeScript, Node/Express and Python/Django for the development of REST API's, express-validator for validation and sanitization middlewares, Jest, Mocha, Chai and Sinon for unit and integration tests, Swagger for API documentation, TSDoc for code documentation, JWT, bcryptjs and Cookies for authentication, authorization and encryption strategies, depending on the database that I choose to work with I use a specific ORM such as Sequelize for SQL databases (I've worked with MySQL, SQL Server, Postgres, AWS DynamoDB, SQLite), Prisma whenever I work with a GraphQL API (and Apollo Client for consuming my GraphQL API) or Mongoose when working with MongoDB, Stripe for handling payments and for the monolithic backends I use AWS for deployment, some services that I normally use are: AWS Amplify, AWS S3, AWS EC2, AWS Route 53, AWS lambdas. I've also worked on a Microservices approach so I make use of Docker, Kubernetes, Skaffold and Gloogle Cloud for infrastructure and deployment, GitHub Actions for CI/CD, NATS Streaming Server as my message queue for my event architecture and Next.js for SSR on the frontend.

Full Stack Developer (React/Node/Vue/Java/Ionic/Angular/Spring) | CIAT (México, Consultoría Innovadora de Aplicaciones Tecnológicas S. de RL.)

April 2017 – June 2019

As a Full Stack Developer at CIAT, I was responsible for the development of new backend features and maintenance to already built in ones by developing new REST web services and adjusting current business logic into the already existing API's in some cases and the development of others from scratch according to specification and need at Walmart Central America using TypeScript, Node, Express, I also build validation and sanitization middlewares by making use of Express-Validator for each and every endpoint I exposed to the client. During my time working there I made use of good development practices by making my code reusable, understandable, easy to read, testable (by implementing unit and integration tests with Jest, Mocha, Chai and Sinon) and well-documented (by documenting my API endpoints using swagger and documenting my code using TSDoc). The database that I used was SQL Server so I made use of Sequelize as an ORM for interacting with the database from my API code. I also dedicated enough time making sure my web services were efficient by ensuring high performance and responsiveness to requests from the front-end by making use of efficient algorithms for different needs. As part of y frontend tasks I mainly worked at integrating the backend endpoints into the React.JS application and developing the frontend logic with the backend data so I used core React features such as functional components, react hooks and react-redux for state management, axios as a REST client for consuming API endpoints and by testing my code with the use of React-Testing-Library. I've also helped on a minor degree at UI development and styling with Material UI, SASS, HTML and CSS. In this project I worked at a team of 6 more developers, a Scrum Master and 3 QA engineers, we were using an agile methodology for the development cycle and due to the fact that the project was geographically taking place in central America, I worked remotely from start to end.

As well as also I've been responsible for the development of new Frontend features to the Telcel eCommerce sites, representative activities are creating templates, components, pages, establishing routes and setting up OSGi services towards the end goal of allowing users to search for Telcel services and products and buying online. I have been in this position for just

about 3 months, but during this time I have been using technologies such as HTML5, HTL, CSS3, Sightly, JavaScript, JSP, Java, Servlets.

At CIAT also I did give support in a Large-scale business project for Grupo Posadas Corporate. Project that has consisted of the migration of its hotel services site (login, access problems, password recovery, reservation availability search, reservation registration, reservation payments, reservation consultation, reservation modification, reservation elimination , sending notifications by mail, creation of user profiles, creation of users, admin panel, role based sessions, analytics, SEO, advanced search of reservations) migrated and developed from only Java technologies to SPA JavaScript / Vue/ React in the Front End and Microservices Java / Spring Boot in the Back End. In addition to additional functionalities from the original such as implementation of user roles / privileges, LifeRay integration for digital assets, digital analytics and SEO with Google API's.
This has been the largest remote modality project in which I have participated, I have learned to work in a multidisciplinary team with professionals from different backgrounds, QA's, BA's,
Designers, PM's and fellow developers working under the Scrum framework. My participation in this project has been from the beginning of it, since the beginning of the first Sprint, my activities as a developer have been as a Back and Front End developer, as far as Front-End development is concerned I have been developing the corresponding SPA of the project where I have applied good development practices, designing and building responsive, mobile-first user interfaces and implementing user functionality. Always with the aim of creating modular code where each component is highly reusable and with a defined purpose, ensuring optimal performance, avoiding code duplication by applying S.O.L.ID and TDD principles for the coding and unit test suite (using Jest.js). Coding using modern ES6 features with use of Babel for compatibility with different types of browsers. Use of NPM packages for different purposes such as form validation, component documentation, internationalization, axios for consumption of REST-type web services, encryption, use of localStorage with its respective polyfills for browser compatibility, development completely in JavaScript and using the benefits of Vue.js/React.js like Vuex/Redux/ Flux for state management and vue-router/react-router for component routing. Another interesting point was my experience with a high level of concurrency where asynchronous programming was
necessary, however JavaScript and its promises and async / await properties were very useful to be able to render the data consumed from the API correctly, avoiding runtime errors. Due to the fact that in this project more than a hundred components were used and high reactivity of the content consumed from complex JSON responses from restful web services was implemented with hundreds of lists nested by user actions, a good analysis of the data flow was necessary to maintain the persistence of the same regardless of the hierarchy and ensuring that the data is constant and expected using localStorage and at the same time respecting authorization and authentication factors through the management of the JWT consumed from the API, respecting the lifetime of the token and user inactivity in the app to log out and clear cache completely. Regarding the layout, I also added improvements to the components delivered by the UX / UI team, these improvements were made with HTML, CSS, SASS and Bootstrap/Material UI/Vuetify. Finally, the component documentation is implemented with Vuese.js/Styleguidist for auto-generation of documentation by component. For the release of code to production I used webpack to generate the optimized files that would be deployed on a Tomcat server. Another important point that I learned is to always have a clear workflow in git, since we work in a team of several developers it is better to use descriptive commits and document code clearly to avoid git merging conflicts.Regarding my participation as a Back-End developer, I have contributed developing restful-type web services under a microservices architecture using Java / Spring Boot / Data / Security and consumption of SOAP-type web services. These web services execute the basic CRUD operations but always taking care to optimize the response performance. In this project I had the opportunity to explore Liferay CMS

for file consumption, Swagger for endpoint documentation and JUnit for unit tests, working with relational databases such as Oracle and Postgres and setting up WebLogic and Apache server.

As a Mobile Apps Developer at CIAT; I developed the functionality of a mobile app for krispy kreme in collaboration with a team of 3 more developers. My main responsibilities and activities were making the UI components functional by integrating the UI with the RESTful API used for that app, so, such activities were consumption RESTful Web services, managing state inside the UI and rendering the proper UI with the specific scenario as well as the other way around by capturing the user input and sending it to the API and process the responses from those workflows, middleware authentication and authorization were also part of my responsibilities as far the UI is concerned. I used Ionic and React Native for the development of this mobile app.

During these years at CIAT, I worked as FullSTack Developer by developing UI core functionality and API integration using the TypeScript based framework Angular 2+ and developing RESTful Web services using the Java framework Spring Boot under a Microservice architecture and implementing AWS S3 for some of these microservices. I had the opportunity to work with only Senior Developers, being me the only Junior one at the time, which gave me the benefit of learning some good coding practices and design patterns such as MVC and principles such and SOLID as well as my first project under a Scrum regime, lessons which helped me a lot throughout my career as a Developer since then.

Maintenance Engineer in Mechatronics. | Coin Acceptors Co. (CoinCo. USA) (Programming Bios System of the embedded microprocessors of Coin acceptor’s electronic cards)

March 2015 – April 2017

My responsability at CoinCo consisted of programming the CoinCo 67095 microprocessor based on the motorola 68HC09 microprocessor, for the correct control of the sensors involved in the acceptance of different types of currencies in Latin America, as well as controlling their mechanical movement by means of electronic actuators.

Other relevant tools

- Angular, React Native, Laravel, Django

Education

- LinkedIn Learning.com

  2014 – Current.

Web Development! What I need, most of the times, I find it here.

- Instituto Politécnico Nacional IPN, México City, México.

2006 – 2009.

Master Degree in Exact Sciences

- Instituto Politécnico Nacional IPN, México City, México.

1989 – 1994.

Bachelor's Degree in Engineering in Communications and Electronics.