

KARTHIK JAMBULINGAM

Technology Architect



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Summary

A passionate Architect and hands-on Sr. Consultant who has over 13 years of experience in design and development of large scale enterprise applications using Microsoft .NET and AngularJS technologies. Proficiency in

- Application architecture, Modelling, Consulting, Performance engineering, Legacy Modernization, Pre-sales
- Thought leadership - Research, mentor, coach, consult, drive and support strategic portfolio initiatives
- Lead design of large scale systems, whiteboarding, advocate best practices, automation, products and tools
- Solid understanding of SOLID principles, Design patterns, UML, SOA, REST, RWD, SPA, TDD, DDD, DI, CI, Agile
- Ensuring design and implementations are in line with organizations transformational strategies and standards
- Develop and maintain architectural artifacts and collaborate with multiple stakeholders
- Research, develop prototypes and reference architectures on new technologies and concepts
- Self-motivated, passionate learner, attend tech-meetups, dev conferences, present solutions and take sessions
- FinTech experience - Wealth Management, Payments and Cash Management – Wire Transfers, SWIFT

Technical Proficiencies

- .NET 4.5, C#, ASP.NET WebForm, MVC 5, WCF, Web API 2, Azure API App, EF, NuGet, MSTest/nUnit, Moq, Autofac, Swagger, Visual Studio 2013/2015, Visual Studio Code
- AngularJS 1.5/2, Typescript, JavaScript, HTML5, CSS3, JQuery, Bootstrap, Sass, Angular Material, Ionic, Grunt, Jasmine, Karma, Underscore, npm, GitHub
- Visual Studio Tools – Architecture, Modeling, Testing, Code Analysis, Diagnostic; TFS, GIT, Resharper
- MS Visio 2016, MS Office 2016, SQL Server, SSIS, Autosys, DB2, Oracle, Windows Services
- Recent UI expertise includes design and development of Hybrid HTML5 web app for browser and iPad, Components-driven architecture /UI widgets, SPA, RWD, TDD, PDD, CI and Agile methodologies.
- Applying Angular2 in my current project and yet to explore ReactJs, Node.js, Azure, .NET Core, Microservices

Education

- Bachelor of Engineering (B.E) in Computer Science and Eng., 2003. Madurai Kamaraj University, India

Employers

- Technology Architect (5 years), Technology Lead (5 years) at **Infosys Ltd** since December 2006 to December 2016
- Programmer Analyst at **Scope International Ltd** (Standard Chartered Bank) – April 2005 to November 2006
- Programmer at **Photon Infotech Ltd** – September 2004 to April 2005
- Programmer at **AI Corporate Solutions** – June 2003 to Aug 2004

Projects

DOL – Decision Tree

Nov'16 to Dec'16

For Merrill Lynch (Bank of America), US

Solution Architect at Infosys Ltd

In compliance with DOL Fiduciary rule, this application allows Financial Advisors to capture series of conditional branching questionnaires about investment of client's retirement income securities to make important decisions and act in the best interest of clients. It is integrated with several downstream systems and other unit of Bank leverages it as UI widget.

Responsibilities

- Worked with business users and analysts to understand then translate business requirements into business capabilities, created high level architecture and design artifacts, captured non-functional requirements
- Setup new code base, reference architecture, development ecosystem for Angular2, GitHub, VS Code

Environment

HTML5, Angular2, Typescript 2.0, Web API, C#, Bootstrap, NPM, Jasmine, Visual Studio Code, GitHub, MS Visio 2016

Understanding Your Life

Jan'16 to Oct'16

For Merrill Lynch (Bank of America), US

Solution Architect at Infosys Ltd

Hybrid iPad application for Financial Advisors to interact with high net worth clients to manage their wealth planning goals. Advisors use it in iPad to capture client's various types of goals which include retirement, education, travel, etc. and feed them into planning downstream systems. It is a context sensitive in nature, also provides ability to manage and generate reports. Integrated with native iPad app and communicates through events to control different main views and flows.

Responsibilities

- Leading design and architecture, created design artifacts, evaluated solutions, implemented key components
- Embraced modern web design concepts of Responsive Web Design, Single Page Application, Mobile-first, component driven design, domain driven design, test focused development
- Trained, mentored team on new technologies and solutions, performed code review to ensure implementation is in line with enterprise standard and guidelines
- Worked closely with several stakeholders from business, analysts, engineering and other development teams
- Took over the product ownership, consult and report to client manager on important decisions and milestones
- Designed Domain driven UI components using TypeScript and AngularJS components and directives
- Practiced Test focused development using Jasmine, Karma, Grunt at client and nUnit, Moq at server
- Defined and implemented REST domain driven APIs using WebAPI that serves across the portfolio
- Leveraged static typing, class, interfaces, inheritance, constructor, arrow, this spread, operators, block scoping of TS / ES6, which are very important for writing scalable, highly maintainable, extensible large size code base
- Extensively used this, closure, revealing pattern of JavaScript in classes, directives, prototype for inheritance, strict mode for writing quality code, static dependency injection and non-instance methods
- Leveraged Lodash.js library extensively for iterating and manipulating collections, made things simpler and easier
- Created, brainstormed, demonstrated the design diagrams for non-trivial components using use case, activity, sequence and component diagrams using MS Visio

Environment

HTML5, AngularJS 1.5, Typescript 2.0, JavaScript, JQuery, Web API, C#, Bootstrap, Material Design, Ionic, Loadsh.js, SASS, Grunt, Jasmine, TFS, Autofac, nUnit, Moq, Visual Studio 2013 and 2015, MS Visio 2007

Client 360 – Goal Sleeve

May'15 to Jan'16

For Merrill Lynch (Bank of America), US

Solution Architect at Infosys Ltd

Client 360 is a context sensitive application hosted in a desktop container provides 360-degree view of a client information in one place. A collection of sleeves forms the application, related business capabilities are grouped, developed and managed by multiple teams, are integrated with Client 360 through NuGet packages. They share common architectural and design patterns and communicate each other through events for scalable, frictionless user experiences. Goal Sleeve is one of the sleeves, a collection of components representing Goal related business capabilities.

Responsibilities

- Responsible for design, explore solutions, implementation, mentoring team, code review and validation
- Adapted Facebook Flux pattern for unidirectional data flow, single source of data for higher system efficiencies
- Worked closely with enterprise UX team to define consistent and responsive web component design
- Domain driven concepts were key in defining Web components, Data stores and packaging
- SOLID principles were instrumental defining responsibilities, dependencies, reusability and communication
- Embraced RESTfulness in defining domain driven APIs using WebAPI and leveraged Swagger
- Automated build process using Grunt and TFS for build, test, package, distribution and continuous integration
- Actively involved in requirement analysis, design discussions, ensuring implemented as per directions
- Leveraged static typing, class, interfaces, inheritance, constructor, arrow, this spread, operators, block scoping of TS / ES6, which are very important for writing scalable, highly maintainable, extensible large size code base
- Extensively used this, closure, hoisting, revealing pattern of JavaScript in classes, directives, prototype for inheritance, strict mode for writing quality code, static (non-prototype) for dependency injection
- Component communication: Used dispatch/register of Angular flux for store and broadcast/emit/listenTo for Angular components, loosely coupled component architecture.
- Designed and created domain driven Angular Components, Flux Stores, Domain events with explicit contracts

Environment

HTML5, AngularJS 1.5, Typescript 2.0, JavaScript, C#, Web API, Swagger, Bootstrap, Grunt, Jasmine, NuGet, Visual Studio 2013, Lodash.js, Angular-flux.js

WM Tools Modernization

Jan'15 to May'15

For Merrill Lynch (Bank of America), US

Solution Architect at Infosys Ltd

A strategic reengineering effort for a group of legacy .NET and Adobe Flex based web applications used by advisors to manage various wealth management snapshot functions. The objectives of modernization include improving maintainability, scalability, performance, target compatibility with IE Edge browser, redesign to N-tier architecture and complaint with enterprise's patterns and guidelines. There were different strategic approaches to be considered based on the ROI, criticality and other constraints of the applications and enterprise guidelines.

Responsibilities

- Responsible for design, explore solutions, implementation, mentoring team, code review and validation
- Redesigned Custom Allocation, a critical application as N-tier application using AngularJS, Web API
- Evaluated, estimated and executed the migration from .NET 2.0 to .NET 4.5 as per migration guide
- Implemented distributed caching, session, standardized service discovery, content overriding and more
- Leveraged RESTful services, existing other services and leveraged partial classes for overriding generated classes
- Automated builds through TFS and WIX for build, test, MSI generation, Code Quality and CI
- Quickly learnt Adobe Flex Builder to code, compile and build existing code to address several regression issues
- Documented existing state of applications and created design diagrams for proposed state using MS Visio
- Performed extensive UI testing and address IE Edge compatible issues with JavaScript and CSS
- Followed unobtrusive JavaScript practices to separate JS code from Html, UI logic from DOM manipulation to take advantage of caching, clean and more maintainable code
- Driven the overall migration initiative by working with several stakeholders

Environment

.NET, C#, ASP.NET 4.5, Web Forms, WebAPI, Adobe Flex Builder 3, AngularJS, TypeScript 1.3, Resharper, Visual Studio 2013

Trust Servicing Dashboard

Jul'13 to Dec'14

For Bank of America, US

Solution Architect, Infosys Ltd

Unified Dashboard web application that provides ability for several source systems to publish different types of alerts to user's desktop in real time and enables users to get their actionable items and notifications in one centralized place. Eliminated associates to visit LOB applications individually look for their tasks. Hosted in a context sensitive container in one monitor while other applications on primary monitor as container listens for server side events and propagates to Dashboard.

Responsibilities

- Responsible for architecture, design and creating proof of concepts
- Led and guided the offshore team of four, briefing requirement, design, POC and reference architecture
- In addition to implementation, working with multiple stakeholders, client interfacing and reporting
- Used VS 2010 Ultimate as design tool for creating use case, layer, sequence, component and class diagrams and Visio for deployment and database diagrams.
- Created bunch of APIs for consuming systems to publish their actionable items and notifications
- Designed the highly-distributed components in .NET and TIBCO Business workflow to orchestrate and process the alerts, process include validation, preprocessing, aggregating additional data, enhance and dispatch
- Leveraged enterprise communication platform which can dispatch alerts to associates desktop where a client component can listen and propagate to container then to web application.
- Used JqGrid for the primary complex grid on the client side for adding, updating and removing action items upon receiving the alerts from server. And leveraged the complex grid functions of sorting, grouping, custom filtering.
- Leveraged advanced JavaScript features of Closure for encapsulation, prototype, unobtrusive approach for cleaner code
- Proposed an alternate solution with SingalR for eliminating usage of complex enterprise communication framework which needs a client component to be installed in every user's desktops

Environment

ASP.NET 4.0, C#, MVC 4, WCF, JavaScript, JQuery, JqGrid, JSON, SQL Server 2008, JMS, TIBCO BW, Enterprise Communication Framework, Visual Studio 2010 Ultimate, MS Visio, TFS, MS Test, Moq

Trust Web

May'12 to Jun'13

For Bank of America, US

Solution Architect/ Lead Developer at Infosys Ltd

- Web platform to manage money movement capabilities for high net worth US Trust customers that includes wide range of cash and banking activities such as Discretionary, Trust disbursement and Banking Disbursement.
- Translated business requirements and NFRs and produced various high and low level design artifacts
- Review the solutions with alternatives with enterprise architects and several stakeholders to align with business objectives and enterprise directions and guidelines
- Modernized and reengineered the legacy application (2-tier, ASP.NET 2.0) to N-tier, ASP.NET 4.5, WCF, WWF, TIBCO, IBM MQ products and compliance with client's framework stacks and patterns.
- Driven the effort to leverage enterprise BMP framework and TIBCO to perform workflow of discretionary and disbursement requests that require multiple level of approvals.
- Independently handled migration of in-process to scalable distributed session and cache management solutions
- Embraced DDD, REST for building WebAPI as UI Services and SOA WCF services to host core business capabilities and orchestrate high resilient interfaces including enterprise payment gateways.
- Embraced Test focused development, Continuous Integration to respond to high quality deliverables in lean Agile and automation environment for client-side and server side products
- Designed, reviewed and supported offshore team for implementing various major business enhancements
- Responsible for design, implementation, creating proof of concepts, migration and performance improvement.

Environment

ASP.NET 4.0 WebForm, C#, WCF, JavaScript, JQuery, JqGrid, LINQ, Windows Services, SQL Server, SSIS, Autosys, IBM MQ, MS Test, VS 2010 Ultimate, MS Visio, Moq

Client Notes

Jan'12 to May'12

For Bank of America, US

Solution Architect/ Lead Developer at Infosys Ltd

Description and Responsibilities

- A web utility, integrated with many LOB web apps to consolidate and manage various forms of notes of customers, integrated with Outlook to synchronize calendar and tasks.
- Designed it as UI widget by integrating it with other applications through iFrame and communicated through iFrame postMessage method

- Built using ASP.NET MVC 4, C#, Razor, Bootstrap, SQL Server, JQuery and WCF.
- Was responsible for design, creating proof of concepts, coaching team, review and support the implementation.

Client Relationship Workstation

Aug'09 to Dec'11

For Bank of America, US

Technology Lead at Infosys Ltd

Description and Responsibilities

- Finder is search tool part of Client Relationship Workstation (CRW) enables users to search and perform various functions on hierarchical data that are being processed by complex nightly batch process which retrieve data from fifteen various types of databases.
- Responsibilities include database modeling, ETL process, design and development of complex components such as hierarchical HTML custom grid apart from requirement analysis, implementation, estimation, planning and execution. Developed using ASP.NET 3.5, C#, MVC 2, WCF, JQuery, CSS, JSON, SQL Server 2005, SSIS, Autosys.

Wealth Management Online

Jul'07 to Jul'09

For Bank of America, US

Programmer Analyst at Infosys Ltd

Description and Responsibilities:

- Client facing internet application to provide account balances of many types of accounts by aggregating data from core enterprise bank systems. It enables customers and associates to generate lot many types of reports in different formats. It is developed in ASP.NET 2.0 Web forms, C#, Oracle 9i, JavaScript, etc.
- Played a key role in development of reporting modules that includes development and client interfacing. Notably created a custom hierarchical custom tree control to improve the user experience using JavaScript and CSS.

WMO Customer Care

Dec'06 to Jun'07

For Bank of America, US

Programmer Analyst at Infosys Ltd

Description and Responsibilities

- Customer service web base application to search clients and third parties against data from core banking systems. It provides associates to save the preferences and integrates seamlessly with other applications, was build using ASP.NET 2.0, Oracle 9i, ASP.NET Web Services and ADO.NET.
- It was an achievement for developing the application within few weeks from offshore location with no connectivity to the interfaces and databases.
- Involved in performance testing, tuning and rollout.

eOPAL

Apr'05 to Nov'06

For Standard Chartered Bank, Japan

Programmer Analyst at Scope International Ltd

Description and Responsibilities

- Payment system provides services to Cash Management, built using ASP.NET, Web Services, windows services, achieved interoperability with Java based UI. Messaging payment instructions globally incorporating with SWIFT network gateways using IBM MQ series.
- Developed interface services which receive payment instructions from SWIFT network / Web Bank / Other payment gateways through IBM MQ / flat files and process them to core banking system. Also, implemented it in Japan at onsite and supported for the Middle East South Asian countries.

ONYX

Sep'04 to Apr'05

For EF Tours, US

Programmer at Photon Infotech Ltd

Description and Responsibilities

- Web based ERP portal, which provides solutions to one of world leading Travel agencies. Sales division uses it to offer, schedule, and process, sell tour products to students of USA, Canada and Europe.
- Multi-tier app build using ASP, VB, ASP.NET, SQL Server, business logic is exposed through DCOM Transaction

server and Transaction engine.

- Developed and customized modules which interacting with Finance application and Tour Production applications through Biz talk server.
- Handled database activities including writing stored procs and scheduling jobs.

eSPINE

Jun'03 to Aug'04

For Leading Hospitals in India

Programmer at AI Corp Solutions

Description and Responsibilities

- Healthcare automation product to manage the various processes of a hospital by interconnecting each department such as appointments, billing, laboratory, etc.
- Also, maintains patient history for every visit and provides them as an information system.
- It is a windows application, developed using VB.NET, ADO.NET and SQL Server 7.
- Developed modules for front desk operations like Registration, Enquiry and Case sheet and administrator services such as User access
- Designed user interfaces, database activities and report generation for those modules

Strength

Self-motivated, Passion for emerging technologies, Early adapter, Quick and Constant learner	<ul style="list-style-type: none">• Constantly learn, experiment and bring the value to table• Attend tech meetups and dev conferences to engage with progress• Was a Speaker at Infosys ADM Academy to present emerging topics• Adapted early on MVC, WebAPI, Angular (1&2), TypeScript, TDD, SPA• Have started my own blog to share my perspectives –
Not afraid to face/take unfamiliar situation or tasks	<ul style="list-style-type: none">• Played different roles in a portfolio from Architect, advisor, enabler, speaker, mentor to developer
Adapt quickly to enterprise changes in direction and culture	<ul style="list-style-type: none">• Been moved around different units within Bank with different expectations/ directions and was able to ensure solutions are aligned with respective unit standards and guidelines
Create good relationship and positive impact with every stakeholder	<ul style="list-style-type: none">• Been a good mentor for junior team members, reliable advisor for clients, active enabler on portfolio initiatives, usually become a key team player

Additional Information

Full Name	Karthik Jambulingam
Current Visa	H1B
Years left in current visa	4 more years, current approval is valid till 9/9/2019
Start date for next job	01/16/2017
Willingness to relocate	Yes, for an interesting opportunity
Possible start date	I can begin work for another employer starting 01/16/2017
Contact Details	+1 609-721-4988 karthikjam@gmail.com Lawrenceville, NJ
Availability for interviews	One day of prior notice