

Chandra Sivaraman

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SUMMARY

- Senior Backend developer/Application Architect
- Architected backoffice sales tax jobs using AWS lambda, SQS, DynamoDB
- Architected port of data loaders from on-prem ASP.NET web application to AWS lambda
- Rearchitected Fandango mobile ticketing backend to use MVC & REST microservices, refactoring legacy monolithic code to be more modular and testable. This backend enables quicker time to market, supports all ticketing transactions and is able to handle significant traffic spikes.
- Architected ticketing API for Fandango partners Google, Facebook and Amazon using .NET Web API & nodeJS microservices. The API facilitated strategic partnerships and is being used internally as well.
- Architected P&L report & data reconciliation automation for hedge fund to enable more nimble trading and data consistency across the organization.
- Architected loan-level pricing models at Bank of America & Countrywide for MBS pooling and trading.
- Architected loan metadata viewer at Bank of America to parse out business rules from source code and provide business analysts a consolidated view of transformations applied to loan data by each application. Empowered analysts to conduct their own research.
- Architected order processing, task management and scheduling frameworks at banks and financial startups to offload backend processing, and provide workflow management and scheduled execution.

SKILLS

- C#, ASP.NET, MVC, Web API, .NET Core, XUnit, Moq
- JavaScript, nodeJS, express, Mocha, Chai, Sinon
- SQL server, ElasticSearch
- AWS lambda, step functions, Terraform, ELK

PROJECTS

Jul 2012-current Staff Engineer at Fandango, Beverly Hills, CA

- Architected port of backoffice data loaders from on-prem ASP.NET application to AWS lambda for cost savings and scalability. **Technologies:** C#, .NET Core, AWS lambda/step functions, SQS, Terraform
- Created SQL & C# parsing utilities to inventory SQL stored procedure calls and SQL objects and operations within stored

procedures for a given codebase. Enabled DBAs to set DB permissions by application for cloud migration project. Speeded up the project by automating manual search. **Technologies:** C#, Roslyn code analysis API, TSql parser API

- Architected & implemented backoffice sales tax calculation job using AWS lambda. Also architected workflow for cleansing theater addresses using AWS lambda and task parallelism to minimize run time. **Technologies:** C#, .NET Core, AWS lambda/step functions, Terraform
- Architected & implemented REST microservices for ticketing, returns and reserved seating to enable social media platforms to integrate with Fandango. Built stateless API wrapper around stateful legacy code. Built nodeJS API gateway layer to aggregate microservices. **Technologies:** nodeJS, C#, .NET, Web API, Elastic Search, SQL Server, AWS, Docker, Terraform
- Architected, led development of MVC backend for mobile ticketing funnel redesign. Designed Ajax API layer, refactored and repurposed complex legacy classes, isolated and injected dependencies and built a comprehensive test suite. **Technologies:** C#, .NET, ASP.NET MVC, SQL Server, JQuery
- Architected, implemented table-driven automation job to cleanse PCI/PII transactional data in accordance with data retention policy. Designed system to be low maintenance and accomodate new fields without requiring code deployment. **Technologies:** C#, .NET, ASP.NET, SQL Server
- Designed REST microservice for VIP Plus loyalty program calling out to external loyalty service provider. Implemented HMAC security around redemptions to prevent abuse. **Technologies:** C#, .NET, Web API, SQL Server
- Architected, designed schema for store credit feature. Integrated store credits into payment module of ticketing funnel. Incorporated decorator pattern to recalculate credit balance as different payment methods applied or removed. **Technologies:** C#, .NET, ASP.NET, SQL Server
- Architected, implemented rules engine for looking up service fees based on configurable arguments. Built admin interface to rules for users and integrated the lookup into ticketing funnel. The engine enabled business to set service fees based on configurable parameters such as theater, ticket type, movie, zip code etc. **Technologies:** C#, .NET, ASP.NET, SQL Server
- Designed, prototyped customer service chatbot to handle standard queries such as refunds, missing confirmation emails, order lookup, etc. Twin goals were to reduce customer service wait time and lower support cost. Used adaptive cards to prefilter requests that could be fulfilled without LUIS calls to lower operational cost. **Technologies:** nodeJS, adaptive cards, Microsoft LUIS

Feb 2010-Jul 2012 System Architect at Tennenbaum Capital, Santa Monica, CA

- Architected diff/merge tool to automate reconciliation of security instruments in trading, accounting and master databases. Principal goals were error reduction and eliminating manual labor. **Technologies:** C#, .NET, WinForms, SQL Server, LINQ
- Architected, implemented automated system to generate on-demand P&L for private funds in portfolio. A backend job aggregated multiple feeds and populated report data and an SSRS report builder shaped the data into P&L format. **Technologies:** SQL Server, SSRS, Excel pivot tables

Feb 2003-Feb 2010 VP Application Development at Bank of America, Calabasas, CA

- Led design, implementation of fixed income models to form optimal loan pools for mortgage securities trading. Translated rough Excel models into high-performance, production-quality code analyzing hundreds of thousands of loans daily.
Technologies: C++, ATL, C#, .NET, SQL Server
- Architected, implemented loan metadata viewer to empower analysts to query hardcoded business rules across multiple codebases. A backend process ran regex searches on code from source control and created a queryable metabase for the web front end.
Technologies: C#, ASP.NET, SQL Server, Regular expressions

Jul 2001-Jan 2003 Senior Engineer at Ocwen, Carlsbad, CA

- Architected, implemented high performance, plug & play order processing framework for RealTrans mortgage platform to replace legacy console application.
Technologies: C++, ATL, VB, COM, SQL Server

Jan 2000-Jun 2001 Principal Engineer at NCommand, San Mateo, CA

- Extended message queue and task management framework for B2B mortgage platform by adding round robin load balancing, throttling, retries, a scheduler and resilient task execution around scheduled/unscheduled service provider downtime. **Technologies:** C++, ATL, VB, COM, SQL Server

EDUCATION

1995 Bachelors, Electronics Engineering, VJTI, University of Mumbai, India