Chandra Sivaraman

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ABOUT ME

I am a systems engineer originally from India living in the Los Angeles area. I have contributed to architecture and development of backends for movie ticketing, hedge funds, and banking. I've recently been building new services and porting existing automated jobs to AWS serverless and eventbridge for Fandango. I have spent much time with node.js and C# .NET. However, I'm curious about programming languages and get excited at the chance to use a new language or tech stack. I have done database design on most of my projects. Even though I haven't spent corresponding time in front ends, I know enough to be dangerous.

I have enjoyed contributing to many large projects over the years - Fandango's ticketing backend redesign and public APIs, P&L report and reconciliation automation for Tennenbaum, mortgage loan securitization engine at Bank of America, order processing engine at Ocwen and Task processing engine at NCommand.

I have a passion for automating tedious work. Faced with documenting all SQL references in vast bodies of code at Fandango, I created a set of parsing utilities to automate it. At Bank of America, to make life easy for business analysts, I created a search engine for business rules strewn across different codebases with a backend that automated code search and indexing.

My favorite activities are visiting libraries, traveling with a camera, solving puzzles of all kinds, writing on tech topics and fiction, and arguing about cricket on family WhatsApp groups.

MY TECH STACKS

- C#, ASP.NET, MVC, Web API, .NET Core, XUnit, Moq
- JavaScript, nodeJS, express, Mocha, Chai, Sinon
- SQL server, ElasticSearch
- AWS lambda, step functions, eventbridge, EC2, SQS, Terraform

MY WORK

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

- Architecture/prototyping/development of real-time movie data loader using AWS eventbridge, lambda and SQS **nodeJS, SQL Server**
- Automated customer data import for migrating to a new customer service portal **nodeJS**
- Architected/implemented port of backoffice data loaders from on-prem ASP.NET application to AWS lambda for cost savings and scalability. **C#, .NET Core, AWS lambda/step functions, SQS, Terraform**
- Designed/built a front end for seat map admin interface to enable exhibitor services to configure auditoriums with specialized seating features such as couch, recliners, love seats, link-unlink seats etc. **jquery, JavaScript**
- Envisioned/created SQL & C# parsing utilities to scrape and inventory SQL references in code. This in turn enabled DBAs to grant least privilege access to SQL objects besides eliminating manual drudgery. **C#, Roslyn code analysis API, TSql parser API**

- Implemented sales tax calculation job using AWS lambda. Architected/implemented workflow for cleansing theater addresses using lambda and task parallelism. **C#, .NET Core, AWS lambda/step functions, Terraform**
- Multiple projects to architect/build public microservices for ticketing, returns, loyalty program and reserved seating. Statelessness achieved by mimicking state in API layer. Designed/built nodeJS aggregation layer. **nodeJS, C#, .NET, Web API, Elastic Search, SQL Server, AWS, Docker, Terraform**
- Designed/prototyped/led development of MVC backend for mobile ticketing funnel redesign. Designed Ajax service layer to enable async calls on front end. Solved problem of intertwined dependencies by refactoring out business logic from presentation code, building a unit test suite with 90% coverage in the bargain. **C#, .NET, ASP.NET MVC, SQL Server, JQuery**
- Designed/implemented job to cleanse PCI/PII transactional data in accordance with data retention policy. Solved for low maintenance by using data driven design. **C#, .NET, ASP.NET, SQL Server**
- Designed/implemented store credit feature. Solved problem of recalculating applied credit in conjunction with various payment methods using decorator pattern. **C#, .NET, ASP.NET, SQL Server**
- Designed/implemented service fee lookup engine, dynamically configurable using JSON rules. Gave business a granular set of knobs to increase conversion. **C#, .NET, ASP.NET, SQL Server**
- Designed/prototyped customer service chatbot to handle common queries. Solved for turnaround time and lowering costs. Since LUIS was expensive, used adaptive cards to filter out requests that didn't need it. **nodeJS, adaptive cards, LUIS**

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

- Designed diff/merge tool to automate reconciliation of financial instruments across multiple systems. Solved for minimizing manual work and increasing accuracy. **C#, .NET, WinForms, SQL Server, LINQ**
- Designed/implemented automated system to generate on-demand P&L for various funds. A backend job populated raw data by aggregating multiple feeds and a report builder shaped the data for the report. **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 loan pricing models for constructing mortgage backed security instruments sold on the street. Productionized Excel models to satisfy quality, volume and time constraints required to run hundreds of thousands of loans daily. **C++, ATL, C#, .NET, SQL Server**
- Envisioned/architected/implemented business rules search engine for business analysts. A backend process scraped and indexed business rules from databases and source code. **C#, ASP.NET, SQL Server, Regular expressions**

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

- Architected/implemented high throughput, resilient, plug & play order processing framework for RealTrans mortgage platform to solve problem with dropped orders. **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 with round robin load balancing, throttling, automated retries, scheduler. **C++, ATL, VB, COM, SQL Server**

MY EDUCATION

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