Vijay Arunkumar

New York, NY

510.541.8740
thekumar@gmail.com
blog.vijayarunkumar.com

Mobile
iOS, GPUImage, Flutter

Web Front-end
React/Redux, Typescript, ES6, HTML5, Google Closure, WebGL, Bootstrap, CSS.

Web Back-end
SpringBoot, GoMux, JPA/JDBC, GORM, SQL (MySQL/Oracle), NoSQL (HBase/DynamoDB/Mongo), Solr, Lucene.

Cloud & Distributed Systems
AWS, Google Cloud Platform, Docker, Kubernetes, Terraform, REST, gRPC, Operational Transformation, RAFT, Bazel Build.

General
Service Oriented Architecture, TCP/IP, RDBMS & ORM, Deep Learning and Neural Nets, Map Reduce, Search, Recommender Systems and Data Mining.

Languages
Java, Go, Typescript, Javascript, Objective-C, Swift, C++, Python

Published iOS Apps

Fotoyaki
ftyki,com

ZDO
zdoapp.com

Profile
Software Engineering Lead specializing in full-stack product development with a love for cutting edge technology and an obsession for simplicity, design, and usability.

Experience

Software Development Engineer, AWS Billing, amazon   New York, NY   04/20 - Now
I am currently focused on improving workflows and processes used to bill our high-spend enterprise customers as part of the Enterprise Support Billing team within the AWS Commerce Platform group.

Senior Software Engineer, Dropbox   New York, NY   07/18-02/20
As a member of the Paper Infrastructure/Platform team, I was tasked with improving the developer experience for Paper Engineers and with making the code more modular and testable. I also worked on making Paper HIPAA compliant. Prior to joining the Paper team, I worked on Dropbox Showcase as a Full Stack Engineer.
‣ Designed and implemented React/Typescript components for our Showcase product.
‣ Implemented a comprehensive list of unit (Jest/Enzyme) and integration tests (Selenium/Capybara) for Showcase, and improved overall code coverage and testing rigor.
‣ Delivered HIPAA Compliance for Paper.
‣ Increased developer productivity by analyzing and streamlining our Bazel dependency graph.
‣ Further improved devbox memory footprint by implementing a shared service sandbox and a sidecar proxy written in Go to aid with discovery and intelligently proxying calls.

Creator / Engineer, Mix.byCollab   New York, NY   01/18-07/18
I built a web based collaborative video editor that employed Operational Transformations to allow multiple users to simultaneously edit videos together. It was a solo effort and spanned across all layers of the stack from UI design to infrastructure management. The stack employed MySQL, MongoDB, Go, gRPC, SpringMVC on the backend, React, Redux, Typescript, WebGL, WebSockets on the frontend, and Kubernetes and Docker on GCP for infrastructure, all built and deployed from a polyglot monorepo using Bazel and Bitbucket Pipelines.

Senior Software Engineer, Google   New York, NY   01/16-12/17
I was a part of the Docs Comments (Docos) team, where we oversaw all aspects of commenting and collaboration for the Docs and Drive suite of apps — from implementing client and backend features to managing our own cloud infrastructure. As a senior member of the team, I was responsible for working with PM, UX, and Eng Managers to deliver projects from idea to launch, owning end-to-end design, project planning and implementation.
‣ Implemented the "Instant Mentions" feature across all platforms (Javascript, Android, and iOS).
‣ Was the primary POC for our iOS code for reviewing external teams' features, designs, and code.
‣ Designed and implemented "Action Items" for iOS (Objective-C and bundled Javascript).
‣ Led the design and scope for syncing Docs Action Items with Calendar Reminders.
‣ Led the effort to improve UI performance for documents with a large comment count, and designed and implemented tiled layout and other improvements resulting in > 98% savings in render time.
‣ Led the security review for our "Copy Comments" feature.
‣ Successfully led and mentored our team's Engineering Resident into a full-time role.

Data Science Consultant, DeepDyve   Redwood City, CA   06/15-12/15
I designed recommendation algorithms for increasing active readership among this startup's users by suggesting similar articles that might be of interest to the user based on collaborative/content filters.
‣ Designed and implemented the "Others also viewed" feature to rank related articles based on link analysis of sequential views by readers. Implemented a simple cookie-based mechanism to collect data about linked articles, and performed ranking on the universal set using Hadoop Map Reduce.
‣ Designed and implemented the "More from the authors" feature to rank related articles based on the number of authors shared between them.

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Senior Web Engineer, Shutterfly   Redwood City, CA   06/13-12/15

As part of the Shared Services Team, I was responsible for rearchitecting our codebase to be more horizontally scalable and for developing and maintaining RESTful web services.

‣ Designed and implemented Single Sign On and OAuth for API access between our brands.
‣ Designed and implemented the Store Catalog and Product Pricing services atop Spring Boot.
‣ Led the effort around secure design practices and introduced STRIDE modeling to Eng teams.
‣ Mitigated security risks to user data by migrating unsalted weakly encrypted passwords to a more secure salted algorithm without requiring a password reset.

Engineer, Bread Labs   San Francisco, CA   03/12-05/13

As a core member of a four-person engineering team, I was responsible for designing and implementing our Ad Platform's backend APIs & services using Groovy/Grails.

‣ Built our product subscription feature, with support for pro-rated subscriptions, invoicing, refunds, discounts, and aPCI-compliant payment processing system using Braintree Payments.
‣ Built our geo-targeting feature using MaxMind, and the APIs needed for location search.
‣ Other features I built include: Campaign Pacing, Domain and Path based URL blacklists, Support for selecting ads/campaigns based on Facebook likes, and more.

Software Engineer, mobclix   Palo Alto, CA   01/11-03/12

I designed and implemented algorithms for optimizing ad network allocations under each publisher, and for pacing the delivery of each ad campaign. Also, as a member of the backend team, I built the REST API that third-party publishers / advertisers used to configure their ad preferences on our exchange. Additionally, I maintained our PHP based developer dashboard, and liaised with dev teams at third-party ad networks to help them integrate with our platform.

Software Development Engineer II, *Microsoft*   Mountain View, CA 05/07-05/10
Senior Software Engineer, Tellme.   Mountain View, CA 09/06-05/07

I led the initial development effort for creating the Speech Experience on Windows Phone 7, and was later involved in the design and development of the UI/UX flows, and speech grammars. Prior to that, I worked on a Voice + Visual application platform for developing voice applications written in XML that worked across Windows Mobile, Blackberry, and J2ME. I worked on the versions for Blackberry, Sprint Instinct, and J2ME phones, on top of which the "Tellme for mobile" experience was built, and also led development for rendering and layout on Windows Mobile 6.5. I was also a member of the committee tasked with defining the spec for MML, the language used for authoring apps.

Software Development Engineer, ebaY   San Jose, CA   02/05-09/06
Senior Programmer, âccenture @ ebaY   San Jose, CA   11/03-07/04

I was part of the team that built K2, an online search engine for finding products and reviews. I was responsible for building a map reduce based site layout analyzer on top of Nutch and Hadoop to detect styling elements and filter out unimportant content from being indexed. I also implemented site specific content scrapers using XPATH heuristics. Prior to that, I was part of the ebay Stores team, where I implemented features such as "Related Searches", and "Cross Merchandizing," I was also involved in the Stores 1.0 project, as part of Accenture, where I helped migrate the ebay stores product from C++/IIS architecture to their relatively new J2EE based "V3" architecture.

Computer Scientist, Adobe   San Francisco, CA 05/10-01/11
Software Consultant, Spherion Consulting @ AOL   Dulles, VA   08/04-12/04
Java Developer, Tek Systems @ Genentech   Vacaville, CA   03/02-07/03

Software Development Intern, *Microsoft*   Redmond, WA   06/01-09/01
Software Development Intern, Cisco Systems   San Jose, CA   06/00-01/01

Education

University of California, Davis, CA   B.S. Computer Engineering, 2002