David Stancu
Software Engineer

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about

I am passionate about building fast, efficient, and maintainable software at scale to deliver impactful experiences. I have worked on solutions from RTOS enabled microcontrollers to large HA distributed services. I love working with strong interdisciplinary teams that push me to try new things. Teamwork is crucial to both technical quality and knowing your customer.

favorite buzzwords

ruby, javascript (es6+, ts), elixir/otp, python, java, scala, kafka, c, spark, assembly, rabbitmq, react, react-native, vue, elasticsearch, git, redis, mongodb, sql, vert.x, akka, heroku, kubernetes, helm, AWS, linux

education

NYU Polytechnic School of Engineering
BS Computer Science

i18n

english (native), romanian (native), spanish (proficient)

projects & oss

`ruby-grape/grape-roar`
HAL object serialization middleware for Grape API.

`swagger-api/swagger-codegen`
Complex shape serialization and OAuth support for Ruby, Python, PHP, Java.

`sgidevnet/sgug-rse`
RPM Software Environment for SGI IRIX 6.5x. Worked on porting several popular UNIX packages including the RedHat tdnf package manager.

`mach-kernel/vertx-ext-spa-ssr`
Server-render React SPA components in parallel on Nashorn and vert.x

`mach-kernel/cadius`
Wrote POSIX bindings and AppleSingle file serialization for All ProDOS FS.

`jekyll/classifier-reborn`
Enabled JRuby support for Bayesian and LSI classifiers.

work experience

Barracuda Networks (11/2020 - present)
Senior Staff Site Reliability Engineer

Architecture for operational resillience for a suite of email archiving products backed by ElasticSearch that index >1mm documents per day.

• Implemented Istio service mesh for edge authorization and traffic management components (e.g. circuit breakers).
• Set up Jaeger distributed tracing to capture application and network runtime traces. SREs can see edges go red to/from specific services in one dashboard.
• Configured AWS VPC peering for easy data replication across environments.
• Built tools for ops team: Slack bot for notifying AWS cost + maintenance events, Lambda for automated resource tagging, Clojure/Joker Istio setup scripts.
• Continuously optimize ES in response to usage (shard distribution + index management).
• Engage engineering teams on architectural improvements from survey & postmortem data.

work experience

Triple Point Liquidity (04/2020 - 10/2020)
Principal Software Engineer

Hyperledger Fabric blockchain powered marketplace for trading private illiquid assets. TypeScript and NodeJS API & smart contracts with React webapp.

• Designed PaaS agnostic devops workflow with Kubernetes and Helm to standardize releases across multiple clouds and/or client bare metal deployments.
• Full CI/CD for development & blockchain peer provisioning + smart contract deploys.
• Designed Redux & Redux Saga webapp with real-time updates via websockets.
• Integrated Auth0 federated SSO with API and smart contract to enforce permissions and proof-of-custody for sensitive documents (PII).

EVEN Financial (10/2018 - 02/2020)
Lead Software Engineer

Akka, Scala, Play and Spark for ETL and API services powering real-time financial product search and application funnel. Lead architecture & hiring for building self-service partner tooling in TypeScript and Node.

• Deployed cached circuit breakers for primary API services to facilitate a live database migration. Infrastructure can now tolerate service timeouts without affecting line of business.
• Optimized unreliable legacy Spark jobs by optimizing queries and moving from RDDs to DataFrame API. Jobs now have predictable runtime and do not hang or affect reporting.
• Wrote real-time replication jobs using Alooma to move data into Redshift.
• Architected server-rendered (fast paint) React SaaS management portal on AWS Lambda with Node API for programmatic access. Easy monorepo workflow with full CI/CD.

Investopedia (01/2018 - 10/2018)
Lead Software Engineer, Personal Finance

Designed and planned new SoA for content rendering and ETL services using vert.x and Kotlin. Managed a team of 4 developers and one intern.

• Developed Nashorn based parallelized & cached React SSR rendering pipeline, with over 10x request/sec performance increase compared to traditional Node.JS and Express.
• Operationalized automated reporting on time-to-first-paint and interactive metrics for SEO site speed monitoring with SpeedCurve.
• Used Terraform to manage all new services on AWS including the provision of ElasticBeanstalk environments, CircleCI for automated testing & deploys.
• Created easy workflow to allow both seasoned and new contributors to easily add independently deployed microservices + event bus endpoints to our ecosystem.

Catalyst (07/2017 - 01/2018)
Lead Software Engineer

Lead software architecture for a new CRM product in the customer success space, from seed to just before series A. Managed a team of 4 developers.

• Designed and implemented actor based sync framework using Concurrent Ruby and Sidekiq for external integrations allowing developers to easily implement sync adapters against external platforms such as Salesforce and Mixpanel without having to worry about state partitions between the internal and external domains.
• Used Ruby on Rails with VueJS for the end-user application. Worked with front-end developers to create a style-guide oriented workflow for releasing components and product features.
• Organized interviews and challenges for engineering hires and created onboarding documentation so new contributors could easily make meaningful contributions their first week.

work experience

MyBankTracker (10/2016 - 06/2017)
Senior Software Engineer

Developed new features for a personal finance site & private ad server using Ruby on Rails and AngularJS.

• Architected and deployed custom built conversion tracking pixel ensuring compliance on more than $2MM in revenue.
• Lead development of credit card terms of service feature extraction for compliance. Used a Bayes classifier to map fine print to a discrete criteria of benefits, earnings, and fees.
• Worked on application features and widgets for the site from product backlog, and ETL ingestion jobs from scraped data provided by external services.