Kevin Yeh

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EDUCATION

2012 - 2016 University of Texas at Austin

G.P.A. 3.97 | Major 4.0 | B.S. / M.S. Computer Science | Film Studies Minor

COURSEWORK Autonomous Robots, Robot Learning from Demonstration and Interaction, NLP,

Wireless/Sensor Networking, Computer Vision and 3D Reconstruction,

Physical Simulation and Animation for Computer Graphics

WORK EXPERIENCE

NAVA PBC | Principal Engineering Lead (Claims Data APIs, Medicare)

2/23 - pr.

- Took on technical leadership for the Beneficiary Claims Data API (BCDA) and Data at the Point of Care (DPC) teams within CMS. Established organization-wide engineering practices and collaborated with leadership to drive team roadmaps, clarify feature lifecycle processes from ideation to planning, prioritization, and production, and improve operations and customer engagement.
- Led high-visibility initiatives to bring the DPC API from pilot to production, building alignment between multiple program stakeholders, leads, and engineers to modernize existing Dropwizard microservices and build a new healthcare provider portal using Ruby on Rails with remote identity proofing and automated provider verification.
- Led and contributed to initiatives to improve consistency, reuse, automation, and cross-team collab across the AB2D-BCDA-DPC FHIR API systems and data pipelines using Go and Lambda.
- Provided infrastructure guidance for Nava platform initiatives and other contracts, and contributed general engineering guidance, templates and resources back to the wider Nava organization.

NAVA PBC | Senior Engineering Lead (Paid Family and Medical Leave, Massachusetts) 1/20 - 2/23

- Led infrastructure engineering for the Department of Paid Family and Medical Leave, working with the state of Massachusetts to stand up a new PFML agency and program. Developed relationships and collaborated with stakeholders across multiple executive offices and contracting agencies to establish groundwork for a new AWS account and environments; built CI/CD standards for teams using Github Actions; designed integrations across multiple internal eligibility, payment, and claims processing systems; and built an operational model for the Claimant & Employer Portal and API applications, including release management, monitoring and alerting, security and compliance, and incident response processes.
- Drove the buildout of two new teams (the Infrastructure and Operational Support teams) including: hiring and onboarding for 9 engineers; development of team boundaries and responsibilities; prioritization of roadmaps; and operationalization of day-to-day processes.
- Led full-stack Next.js and Flask feature dev to digitize the Appeals process, improve leave admin tooling for employers, and drive efficiency improvements for the Contact Center and mailroom.

NAVA PBC | Tech Lead (Quality Payments Program, Medicare)

3/18 - 12/19

- Co-led a re-architecturing of the program's data analysis pipelines using Spark/Scala as an embedded technical and policy implementation SME on an external contracting team.
- Led migration of application and ad-hoc task infrastructure to ECS Fargate, including CI/CD pipelines, developer tooling, and operational processes.
- Worked closely with stakeholders and external teams to build in-house expertise in modern cloud infrastructure and replicate terraform and Fargate patterns across new and pre-existing projects.
- Pushed for maintenance and performance improvements to Jenkins CI/CD and build processes, including containerization of master/workers to simplify plugin & version upgrades and improve worker autoscaling.

KICKSTARTER | Platform/Payments Engineer (2016), Payments Lead (2017 - Feb 2018) 5/16 – 2/18 Designed and built a low-latency recommendations service on top of Dropwizard & Kinesis. Provided close mentorship for Data team to build a new Latent Semantic Index model and a robust blending/weighting pipeline. Helped support and design tracking and experiments. Collaborated closely with Devops to develop a stable, reliable, and observable microservice infrastructure running on Docker via ECS + CFN and monitored via Telegraf/InfluxDB/Grafana and ELK. Built and open-sourced an InfluxDB Dropwizard metrics integration library. Supported Data team in bootstrapping a followup classifications service for CS tickets and message spam.

Led planning and development for Ruby on Rails on-demand and subscriptions-based payments systems:

- Shared tech lead responsibilities, planning team roadmaps and sprints and leading a push for improvements in clarity and reliability of the payments infrastructure using type contracts, STI-to-MTI migrations with improved data integrity and usability, streamlined transaction and ID verification flows, explicit separations of data/logic concerns and reduced side-effects, improved API consistency and resiliency, and more visibility and accountability for test coverage and style guidelines.
- Led efforts to improve payments support flows for CS+Integrity+Data+Product, improving cross-training, documentation, diagrams, & triage procedures and surfacing better paper trails for transactions, requests, and card authorizations.
- Worked closely with Stripe and Finance to develop Drip's monthly and ad-hoc subscriptions payments infrastructure, building out an observable and financially-accountable infrastructure with an emphasis on clear, common mixins for easy extensibility, clean integration and migratability for legacy infra, and future microservice extraction.
- Supported Japan launch, handling non-decimal currencies and strict JP identity and compliance requirements.
- Supported + led cross-team Rails 4.2 & 5.0 upgrades for our payments and monorails applications.
- Implemented creator watchlist and sanction checks, communicating heavily with third-party vendors and project stakeholders on project status, roadblocks, and product and legal questions regarding kanji translation reliability and support.
- Migrated video pipeline to HD encodings with adaptive streaming support.

Additional Experience

SPACE TYPE | Studio Partner, Creative and Technical Director

6/20 - pr.

- Led design and development of web-based generative design tools, interactive typographic experiences, and digital platforms for clients using a variety of frameworks and content management systems, including Next.js, Webflow, Contentful, Monday CRM, Stripe, Stream, and p5.js.
- Led and collaborated on workshops, courses, and talks related to computational typography and design at places like The Cooper Union, MIT Media Lab, and multiple conferences in the U.S., Mexico, and France.
- Formalized operational structures for managing studio projects, client relationships, timelines, and long-term roadmaps.

MONGODB – Built and maintained the MongoDB Rust 1.0 driver, presenting at Rust NYC. 2015

CEREBRI – Built the Austin211 pilot Android app, empowering call centers with IBM Watson by connecting users to social services. Partnered with United Way and seed-funded by IBM.

GEOTRELLIS – Integrated Apache Spark + Cassandra support into a high-performance geospatial data processing engine and fixed issues in the Scala framework library.

AMAZON – Integrated DynamoDB support into RDS backend; designed and developed the database and framework for non-invasive protection and restoration of deleted RDS instances.

BLASTRO NETWORKS – Updated API, parsers, bitmap caching, and networking procedures for performance and portability to smartphones, tablets, and connected TV; rebuilt the Android UI/UX and deprecated code structure using modern libraries; developed custom interactive components and implemented synced accounts, playlists, video ads, and FB integration.

Personal + Academic Research

HACKTX As director of innovation, built creative solutions to improve education, diversity, and overall experience for 700+ attendees: infographical outreach (D3, CartoDB), hardware education, open-sourced motorized robots and light-sensitive instruments, 3D printing tutorials, and Slack-integrated mentorship and voting systems.

Nomad An optical-flow and feature-based tracking system for painting and motion-tweening 2D details into 3D environments (Paperman-style) + perspective mapping modeled structures into non-planar AR environments.

NAO-GRAV Taught stability actions to humanoid robots using auto-gravity compensation and keyframe-based learning.

PSC Leveraged deep-linked, cross-domain, bilingual phrase alignments for sentence compression.