

WORK EXPERIENCE

- **Expedia Group** Seattle, WA
July 2024 - Present
Distinguished Engineer
 - **Marketing Technology and Generative AI (July 2024 - present)**: Expedia Group Marketing
 - * Partnered with business, product and engineering leaders to shape and execute a Generative AI and marketing-technology roadmap with clear, measurable outcomes.
 - * Led experiments and platform improvements to enhance site speed and Core Web Vitals, including reducing Largest Contentful Paint (LCP) by 60%+.
 - * Designed and helped deploy AI-powered business workflow automation, improving productivity and efficiency by 320% while maintaining quality at or above prior baselines.
 - * Led and was hands-on in building AI-powered legal and compliance review workflows to improve risk management, reduce manual review effort and accelerate time-to-market for customer-facing initiatives.
 - * Provided technical leadership for launches such as Trip Matching and OpenAI microapp integration, from design reviews through implementation and rollout.
 - * Led technical conversations with partners including Google, Meta and TikTok to identify and deliver co-development and collaboration opportunities.
 - * Drove adoption of AI tooling and development practices across engineering teams and mentored engineers, data practitioners and product managers on using AI to improve productivity and outcomes.
 - * Led bar-raising Operational Excellence initiatives, including work on DORA metrics, cloud spend, SLA/SLO definitions, Correction of Error practices and the authoring and review of RFCs.
 - * Delivered proofs of concept for AI-powered trip planning experiences, showcasing how Generative AI can enhance itinerary discovery, personalization and planning for travelers.

- **Independent Consulting** Remote
Jan 2024 - Present
Fractional CTO / Technology Advisor
 - **Fractional CTO engagements (Jan 2024 - present)**: Multiple SMBs and Early stage Startups
 - * Advised SMBs on analytics and technology stack improvements, helping modernize platforms and enable better, data-informed decision making.
 - * Helped startups in the fintech/crypto space move from initial ideas to MVP, guiding technical choices, architecture and execution.

- **Periodikal - Remote** New York, NY
Dec 2022 - Present
Fractional CTO
 - **Automated Advisory for Accounting Professionals (Dec 2022 - present)**: An innovative advisory platform for Accounting Professionals, designed for efficiency and intelligence.
 - * Led a small, remote team to deliver a high quality Minimum Viable Product (MVP) resulting in customer acquisition.
 - * Led initiatives to refine and align the product with market demands, achieving a strong product-market fit and enhancing overall competitiveness.
 - * Maintained the product backlog and helped prioritize features to rapidly deliver business value.
 - * Drove effective vendor selection and negotiation efforts, resulting in a low-cost, scalable technology stack.
 - * Contributed to fund-raising initiatives to support long-term growth.
 - * Managed critical areas including IT, security and compliance, ensuring a seamless and compliant operational environment.

- **Ponto Software** San Francisco, CA
Mar 2022 - Dec 2023
Engineering Manager
 - **Platform - Observability**: Monitoring, logging and distributed tracing (Mar 2022 - Dec 2023)
 - * Led observability initiatives across the application stack, resulting in robust monitoring, logging and distributed tracing on GCP.

- * Built SDKs to enable easy instrumentation of the application stack.
- * Implemented dashboards and incident alerting to reduce mean time to detect and mean time to recover.
- **Risk/Compliance/Fraud/AML (Mar 2022 - Dec 2023):** A platform for KYC, risk/fraud/AML detection and prevention
 - * Led implementation of robust Know Your Customer (KYC) and Customer Identification Program (CIP) processes and features, ensuring low-friction user onboarding while adhering to compliance standards.
 - * Implemented effective transaction monitoring systems, enhancing the platform's capability to detect and prevent fraudulent activities in real time.
 - * Led the development of Anti-Money Laundering (AML) measures, ensuring ongoing monitoring and timely alerting to mitigate potential risks.
 - * Hired, mentored and worked with a high-performing team of 20 engineers, establishing the team culture and values along the way.
- **Data Platform and Analytics (Mar 2022 - Dec 2023):** A data platform for advanced analytics, auditing and model training
 - * Led the development of a robust data platform ingesting datasets from internal and external systems.
 - * Managed the life cycle and relationships between datasets from disparate sources to provide rich analytical and feature store capabilities.
 - * Delivered executive and product-level dashboards with near real-time insights into assets under custody, transaction and user acquisition and retention volumes, marketing analytics, etc.
- **Marketing (Mar 2022 - Dec 2023):** Marketing initiatives
 - * Set up tracking and conversion attribution for all marketing channels.
 - * Delivered executive-level dashboards for marketing insights and analytics, reporting KPIs such as customer acquisition costs, click-through rates, engagement, conversion and ROAS.

● **Hearst**

Principal Software Engineer/Architect/Sr. Director, Engineering

New York, NY

Aug 2020 - Mar 2022

- **Resin (Aug 2020 - Mar 2022):** Resin Subscriptions (<https://www.resin.com/>)
 - * Defined a vision and a roadmap for a modern platform, aligning technology initiatives with business objectives.
 - * Led the development of a Minimum Viable Product (MVP) that enabled a subscription-based business model tailored for the media industry.
 - * Orchestrated the implementation of key capabilities, including paywall and content metering, order management, fulfillment, payments and customer acquisition and retention features using a domain-driven microservices architecture with advanced event-based capabilities.
 - * Hired, mentored and collaborated with a 70-strong geographically distributed team to deliver high quality features on time in a fully remote setup.

● **Expedia Group**

Principal Software Engineer

Seattle, WA

June 2006 - Aug 2020

- **Marketing (Architect/Principal Engineer, 2017 - 2020):** Expedia's Marketing Technology Platform
 - * Delivered a high-volume omni-channel communication platform deployed as part of the COVID response.
 - * Built an intelligent SEM (Search Engine Marketing) campaign management platform managing a portfolio of millions of keywords, ads and bids.
 - * Drove ROAS (Return on Ad Spend) optimization and user acquisition with a consistent shopping experience, contributing to top-line and bottom-line growth.
- **Experimentation (Sr. Engineer/Lead, 2016 - 2017):** Expedia's internal A/B testing and data capture platform
 - * Built a platform for experiment management, data capture, tracking, analysis and visualization of results to accelerate testing velocity of customer-facing features at scale.
 - * Delivered a large-scale visitor identification solution to unlock personalization and product improvements based on enhanced product and user analytics.
- **User (Sr. Engineer/Lead, 2014 - 2016):** User profile data management platform
 - * Led development of cross-device, cross-brand user identification enabling personalization and higher quality analytics.

- * Delivered secure solutions for authentication and account and profile data management to improve end user experience.
- * Led domain integration efforts between platforms during mergers and acquisitions.
- **Partnership with TD Bank (Engineer):** A travel solution for the loyal customers of TD Bank
 - * Joined a team to deliver a travel solution for the loyal customers of and in partnership with TD Bank.
 - * Delivered a loyalty program allowing customers to earn eligible points and use them towards future purchases.
 - * Coordinated release activities for the product, resulting in a new successful venture for Expedia Group in terms of net revenue.
- **Contextual Search (Engineer, 2012 - 2014):** Travel search: intelligent matching of inventory and traveler demand
 - * Built data pipelines for low-latency, highly relevant search API needs.
 - * Implemented data quality checks and supporting infrastructure and processes for dataset releases.
- **Coupons and Store Credit (Engineer):** Coupon and store credit management
 - * Led development efforts to deliver store credit functionality in the legacy platform.
 - * Coordinated efforts to deliver store credit to all impacted customers and meet compliance requirements.
 - * Delivered an on-time, high-quality product resulting in significant top-line growth.
- **Platform Infrastructure (Engineer, 2006 - 2012):** A modular, OSS-based platform to accelerate delivery of high-quality features to solve traveler needs
 - * Helped migrate from a legacy C++-based monolithic platform to a newer SOA-based OSS platform.
 - * Built custom SDKs and tooling to enhance developer productivity.
- **Volunteering:** City of Seattle
 - * Led a small team as part of Seattle's Innovation Advisory Council.
 - * Built and released Seattle's Affordability Portal (<https://www.affordableseattle.org/>) to help disseminate information and raise awareness amongst people in need.

PROFESSIONAL SKILLS

- Engineering leadership, team building and recognition, strategic planning, process improvement, product management, product delivery, cost management
- Public speaking, presentation skills, communication

PROGRAMMING SKILLS

- **AI / Generative AI:** AI automation and Agentic experiences; Context Engineering best practices including Function/Tool calling, Agentic Retrieval Augmented Generation (RAG), Long and short Term Memory; Frameworks such as LangChain, LangGraph, Langfuse, Langsmith, Strands, etc.
- **Cloud Technologies and Platforms:** AWS, GCP, Digital Ocean, Vercel, Fly, Firebase, Supabase
- **Enterprise Architecture:** Distributed systems, domain driven architecture, microservices, cloud patterns
- **Observability:** Distributed tracing, session capture, Splunk, Datadog, Google Cloud Monitoring, AWS CloudWatch, BetterStack, etc.
- **Languages:** Python, Scala, Java, Kotlin, JavaScript/TypeScript, C++, Go, SQL
- **Storage:** Object storage, S3, Cloud Storage, Spaces, NoSQL, Redis, DynamoDB, MongoDB, RDBMS, Postgres
- **Data Platform:** BigQuery, Apache Beam, Apache Spark, Apache Iceberg, Presto, AWS Redshift, AWS Athena, low-cost data lakes
- **Data Streams:** SNS, SQS, Pub/Sub, Kafka, Kinesis, Firehose
- **Enterprise Concerns:** Data governance, compliance and security, zero-trust network architecture
- **DevOps and Engineering Practices:** AI-assisted coding practices, 12-factor app development, Apache DevLake, CI/CD, Cloud Build, GitHub Actions

EDUCATION

- **Oregon State University**

Master of Science in Computer Science; GPA: 3.89

Corvallis, OR

Sep. 2004 – June. 2006