

Vice President of Engineering

Accomplished and visionary executive with extensive experience in driving innovation and delivering exceptional results across complex technical environments.

Adept at leading cross-functional teams, leveraging cutting-edge technologies, and implementing data-driven strategies to solve intricate business challenges. Recognized for exceptional leadership, strategic thinking, and ability to transform data into actionable insights that optimize operations and fuel growth. Expert at implementing sound development principles, including continuous integration/deployment, SOLID, DRY, YAGNI, and Test-driven Development to ensure optimal software quality and efficiency. Seasoned professional dedicated to fostering a collaborative culture and empowering teams to excel.

Areas of Expertise

- Data Analytics
- Machine Learning & AI
- Data Engineering
- Big Data Technologies
- Predictive Modeling
- Cloud Computing
- Data Visualization
- Business Intelligence
- Team Leadership & Management

Career Experience

VTS.com, New York, NY

2021 – Present

Vice President of Engineering (2023 – Present)

Spearhead advancement of technical vision and alignment with business goals for VTS's lease, market, and data product lines. Liaise with sales, product, and executive teams to align technical roadmap with corporate objectives and expansion strategies. Head dynamic team comprising 50 front-end, back-end, data engineers, and managers.

Key Accomplishments:

- Expedited time-to-market results by improving team structure and software development lifecycle.
- Cultivated engineering culture of paramount excellence by championing innovation and creation of top-tier solutions.
- Pioneered establishment of a cohesive platform, encompassing data and functionality by directing technical vision, strategy, and architecture across three product lines.
- Effectively integrated diverse technical platforms into a singular framework, drove operational insights, and streamlined efficiencies for customers in leasing and property management workflows.
- Managed three distinct reductions in force events and strategically restructured organization to closely align with profitability-focused business objectives.

Senior Director of Engineering & Data (2021 – 2023)

Fostered a data-centric culture and yielded products driven by premier first-party data sets. Formulated robust data strategy to integrate pivotal data assets spanning diverse technical platforms. Envisioned and outlined mission, vision, and goals for a cross-functional team of 35 individuals to steer execution of data strategy. Collaborated with business units to embrace a cohesive data approach. Oversaw engineering and product leaders in a direct managerial capacity.

Key Accomplishments:

- Revamped data organizational structure to expedite deliveries aligned with business imperatives.
- Instituted a contemporary data stack using AWS, Snowflake, and dbt to enable VTS to seamlessly process and model data at scalable magnitude.
- Drove development of unified data and machine learning platform leveraged by product and data science teams.

- Pioneered methodologies and norms allowing VTS to thrive within a federated data ownership framework bolstered by centralized governance.

AI Labs, BlackRock, New York, NY

2018 – 2021

Director of Engineering

Pioneered inception of leadership team within AI Labs. Established engineering discipline and fostered a culture marked by collaboration and infinite creativity. Spearheaded one of pioneering teams within Blackrock to harness the potential of the public cloud. Orchestrated collaborative endeavors with infrastructure and security units to assure implementation of secure data handling protocols. Elevated efficiency of Data Scientists by conceptualizing and enacting a machine-learning platform.

Key Accomplishments:

- Devised operational protocols for AWS infrastructure, encompassing data pipelines, backend APIs, and ancillary systems.
- Developed ML platform to streamline deployment and product ionization of bespoke ML algorithms.
- Initiated recruitment and expansion of a team of versatile data and software engineers from ground zero to 10 members.
- Formulated cloud-native vision, strategy, and trajectory as well as propelled AI Labs toward swift dispensation of cutting-edge machine learning solutions.
- Expedited construction of pipelines, APIs, and data-rich web-based applications by creating and defining engineering blueprints and preeminent methodologies.

Spotify, New York, NY

2017 – 2018

Software Engineering Manager - Data

Forged inception of a data engineering practice within a novel, multifaceted data mission. Ensured equitable recruitment practices, while cultivating a diverse and high-caliber data engineering ensemble. Assumed role of interim Director of Engineering for data mission by steering trajectory and objectives. Engineered a just and impartial framework for interviewing and selecting engineers. Collaborated with engineers to draft architectures primed for scalable management of data. Provided mentorship and guidance to engineers to aid in establishment of efficient agile delivery processes.

Key Accomplishments:

- Instituted a pioneering major/minor initiative, cultivated T-shaped engineers, and mitigated confinement of talents to singular specializations; currently gaining traction across organization through program's adoption.
- Orchestrated professional advancement of a team ranging from five to 11 engineers by instating a consistent feedback loop and crafting semi-annual professional development plans.
- Efficiently enacted quarterly objectives and key results for managers within data mission, a metric for gauging efficacy of leadership-led initiatives.

Dow Jones, Minneapolis, MN

2013 – 2017

Head of Data Engineering (2014 – 2017)

Catalyzed formation of Data Science and Engineering team (DS&E); charting course as a founding member. Collaborated with data scientists and product managers to furnish Dow Jones with insights by leveraging robust big data tools. Forged strong partnerships with data scientists to materialize Customer Knowledge Engine. Orchestrated extensive user analysis and modeling. Played a pivotal role in leadership cohort and outlined standards for application, API, quality, and delivery protocols at Dow Jones. Oversaw a dynamic team of seven accomplished data engineers by steering multiple parallel product delivery timelines.

Key Accomplishments:

- Spearheaded adoption of Google Cloud Platform and Docker at Dow Jones to initiate pioneering trajectory in technology adoption.
- Created numerous executive-level KPI dashboards employing Elasticsearch for in-depth analysis, and custom Kibana 3 modules for presentation.

- Pioneered development of proof-of-concept real-time notification system spanning multiple interfaces to enable WSJ.com to concurrently notify users via web, app, and email.
- Directed construction and deployment of over 20 expansive data pipelines by integrating Luigi, Hadoop (EMR), Google BigQuery, Google Cloud Dataflow, and Elasticsearch.
- Facilitated instantaneous access to analysis outcomes and API for external stakeholders and advertisers to amplify precision in customer targeting and fortify user retention rates.
- Engineered a universally applicable real-time logging service to facilitate logging of unstructured events via a simple HTTP GET request to a tracking API; harnessing capabilities of ELK stack.

Senior Software Engineer | Technical Lead (2013 – 2014)

Initiated and expanded an engineering team responsible for devising real-time analysis products and recommendation engines for Wall Street Journal (WSJ.com) and MarketWatch.com. Engineered a recommendation engine web service and delivered personalized article suggestions to users based on reading history and interests. Pioneered application of infrastructure as code for efficient deployment and management of Amazon Web Services cloud infrastructure. Facilitated team growth from a solo engineer to a cohesive unit of five to foster synergy and accomplishment.

Key Accomplishments:

- Delivered cloud-based solutions using Apache Storm, LogStash, and Elasticsearch to process substantial real-time data volumes.
- Employed message queuing, Apache Storm, and AWS CloudSearch in initial version as well as subsequently upgraded to Elasticsearch for Version 2.
- Developed News Helm, a real-time analytics system akin to ChartBeat to empower WSJ.com journalists with immediate insights into user behavior. Harnessed ELK stack for real-time data collection, storage, and reporting.

Thomson Reuters, St. Paul, MN

2010 – 2013

Senior Software Engineer | Technical Lead

Orchestrated deployment of an MVC-based web application called PUBS designed to oversee document creation and approval workflows. Guided sales specialists in contract generation for customer negotiations within Thomson Reuters. Managed PUBS contract submissions for various approvals and facilitated customer account provisioning for DataScope Select system upon approval. Seamlessly facilitated request/response and publish/subscribe messaging patterns with ZeroMQ. Enabled rapid data exposure using Microsoft Data Services and centralized authentication with OAuth for DataScope Select technology group. Pioneered a transformation towards accelerated development and release cycle. Overcame technical challenges and gathered user requirements utilizing a suite of tools; releases doubled from three to six per year. Aimed to further increase releases to a monthly frequency in 2012 by collaborating with businesses to establish a product backlog and sprint process.

Key Accomplishments:

- Constructed highly adaptable web applications using Autofac and MVC frameworks to enable streamlined single-responsibility design and extensive unit test coverage. Achieved 85% code coverage through meticulous testing for PUBS.
- Instituted event store mechanism to track data and state changes in critical domain objects, such as contracts and user profiles; offering product owners insightful view of entities' historical states.
- Conducted in-depth research and proof-of-concept evaluations to explore various cloud offerings and NoSQL databases (AppHarbor, Azure, MongoDB, and Cassandra) for the PUB's application.
- Developed a browser-based calculator utilizing CoffeeScript, jQuery, and jQuery-UI to empower sales specialists by allowing quicker and simpler contract creation.
- Integrated Microsoft Data Services and OAuth to seamlessly connect PUB's data and authentication with external applications.
- Implemented ZeroMQ to establish decoupled communication between web application and Windows service.

XATA Corporation, Eden Prairie, MN

2009 – 2010

Senior Software Engineer | Team Lead

Devised and executed a GIS-oriented sensor observation repository based on Open GeoSpatial standards to proficiently capture and transmit data from numerous poorly connected physical sensor devices. Adeptly managed millions of monthly sensor observation data points. Advocated for and led adoption of agile development process to cater to escalated release schedules demanded by sales cycle and market needs.

Key Accomplishments:

- Engineered a comprehensive sensor observation repository system, encompassing a SQL Server 2008 database, a layered application stack interfacing with database, and a RESTful WCF service for device and application integration.
- Successfully delivered a market-ready sensor system within a remarkable nine-month timeframe from inception utilizing agile methodologies by demonstrating adaptability and rapid deployment capabilities.
- Spearheaded seamless integration of NHibernate to streamline data access layer and effectively reduce code complexity.
- Optimized T4 templates expedited code generation, while a Service pattern consolidated business logic.

Education

Credits toward a Management Information Systems Degree, University of Wisconsin, River Falls, WI