

Vasu Balakrishnan • [in/vasubalakrishnan](https://in.linkedin.com/in/vasubalakrishnan) • vasu.fyi

Accomplished software development engineer with over 20 years of hands-on experience that includes analysis and design, architecture, development, and leading teams, building web, desktop, mobile, cloud-native applications and big data analytics. Passionate technologist dedicated to continuous learning and professional growth, mentoring talent, and improving development processes.

Soros Fund Management, New York

Principal Software Engineer — 2009 - PRESENT

Soros Fund Management is a privately held family office fund that invests in equity, credit, macro, and fixed income markets worldwide.

Significant contributions include:

- Designed and built real-time dashboards for Portfolio Managers and Senior Leadership. Multiple delivery models (*desktop / web / native iOS*) with robust drill down and visualizations, featuring P&L views, risk measures, compliance monitoring and security.
- Standardized the application technology stack across the firm (*.NET Core, Angular, Azure Service Bus, Web Sockets, Redis*), led the team to a successful migration of legacy apps to new stack and continued focus to leverage and migrate to cloud native architecture (*containers, microservices*).
- Built high performance/throughput backend services (*Akka actors*), applications (*Angular*), data analytics (*pandas, numpy, pyspark, koalas*), data pipelines / integrations (*market data - Bloomberg, Axioma*), and reporting solutions (*PowerBI, SSRS*) for major business units and data consumers (*Trading / Operations / Controllers / Private Equity / Manager Selection*).
- Established the current DevOps process (*JIRA, Bamboo, Git, Octopus Deploy*) for all of IT. Worked closely with infrastructure / development teams to implement current best practices.
- Developed in-house PoC offerings to showcase the business case for alternative stacks and technologies (*Web - Angular, React; Containers - Docker, Kubernetes; NoSQL databases - Postgres, MongoDB, InfluxDB; Monitoring tools - Grafana, Splunk; Languages - GoLang, F#*).
- Established and responsible for the cloud initiative to migrate on-premise resources to Azure. Partnered with Microsoft, internal teams (*infrastructure and cybersecurity*) to facilitate this path forward.
- Built out data analytics / compute platform for the firm (*Databricks, Apache Spark, Delta Lake*). Identified key challenges in the current environment and future growth needs, drove the PoC partnering with the vendor, demonstrated the capabilities to multiple teams (*Risk, Quants, Analysts*) and rollout the new platform for firm-wide use.
- Partnered and provided guidance to the Risk team to migrate their legacy reporting framework (*Excel / VBA*) to modern tool sets (*Databricks, pyspark, koalas, PowerBI*).

Ivy Asset Management, New York

Senior Developer / Tech Lead — 2005-2009

Led the team in design and development of end to end core business functions (*Portfolio Allocations, Liquidity Analysis, Transaction Management, Manager Exposures, Compliance Monitor, Risk Limits, Statistics, et al*).

Cognizant

Tech Lead — 1996 - 2005

Provided technical leadership for development teams on multiple engagements across industry verticals (*Retail banking, Hospitality, Pharmaceutical and healthcare information solutions provider*).

LANGUAGES C#, Python, C++, SQL, JavaScript, TypeScript, HTML 5.0 / SCSS, Swift, R, F#

DATABASES SQL Server, PostgreSQL, Redis

PLATFORMS Server (*.NET Core*), Web (*Angular*), Mobile (*iOS*), Desktop (*WPF*), Analytics (*Apache Spark*)

CLOUD Azure, Docker, Kubernetes, Databricks, Delta Lake, Azure Service Bus, AppInsights

COURSES

Machine Learning Foundations, Washington University (*Coursera*)

The Data Scientist's Toolbox, John Hopkins University (*Coursera*)

Neural networks and Deep Learning, deeplearning.ai (*Coursera*)

AI for Trading / Machine Learning Engineer (*Udacity*)

EDUCATION

Masters of Computer Applications (M.C.A), *Coimbatore Institute of Technology - India*

Bachelor of Applied Sciences (B.Sc.), *Coimbatore Institute of Technology - India*