Spencer Sullivan

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SUMMARY

Senior Software / Data / ML Engineer with 6+ years of experience in building scalable applications that rely heavily on data and modeling. Currently helping Spiceworks with Petabyte scale data pipelines and applications.

IDEAL JOB

I am looking for a job in the San Diego area where I can significanlty impact the business, work closely with researchers / data scientists to develop, productionize, and scale models, and continually learn and grow as an engineer.

KEY SKILLS

Platforms: Amazon Web Services (AWS), On-Premise Cluster
Big Data Tools: Hadoop, Hive, Spark, Kafka / Kinesis
Databases: Snowflake, Presto, Athena, Redshift, Postgres, Redis, Dynamo
Programming Languages: Python, Go, Ruby, SQL, HTML, JS
Data Pipeline Frameworks: Airflow, Luigi, Glue, Matillion
Other: Docker, Git, Gitlab, Kubernetes, DataDog, Tableau, Lambda, SQS

CAREER

Senior Software Engineer   2017 - Present
Spiceworks, Austin
Helping to architect and develop large-scale data pipelines for various business needs. Consulting as a technical expert across teams, leading crucial conversations, and mentoring junior developers.

Software Engineer   2014 - 2017
Spiceworks, Austin
Worked with a team of developers to write business-critical, high-volume, low-latency systems. Mostly focused on lower-level coding in Golang.

Software Development Intern   2010 - 2014
Spiceworks, Austin
Started writing test automation and worked my way into web development. This time was primarily spent sharpening my software engineering skills, learning how to translate business requirements to code, and learning how agile teams work.

EDUCATION

BS in Computer Science, *University of Texas at Austin*   2011 - 2014

EXPERIENCE	**Real Time Bidder** *Set of services for intelligently bidding on ad inventory*

Real Time Bidder *Set of services for intelligently bidding on ad inventory*

- Wrote services that respond in under 10ms (including network latency)
- Horizontally scaled web server up to 1 billion requests per day
- Designed micro-service architecture comprising 10+ services
- Productionized machine learning model to compute bids
- Helped scale product from $0 to ~$10M in annual revenue
- Rigorously tested and wrote monitoring

Business Identity Graph *Database of companies who visited Spiceworks*

- Generated graph from millions of data points from several sources
- Designed data model where graph was iteratively updated in-place
- Resolved business attributes from a connected component of the graph

Account Intelligence *Dashboard showing businesses and their interests*

- Wrote data pipeline to calculate purchase intent of businesses
- Integrated Tensorflow model from data science team into pipeline
- Architected pipeline to leverage business identity graph

Pixel Tracking *Web-tracking service integrated with 100's of companies*

- Led rewrite of service
- Integrated open-source browser fingerprinting

Segmentation service *Puts people into segments based on their actions*

- Wrote jobs to send billions of events into system every month
- Integrated with 3rd parties using cookie matching
- Debugged / resolved problems around user-identity mappings
- Collaborated with Data Science to incorporate intent modeling

Other projects

- Ad delivery workflow tools
- Attribution reports / Ad ROI in Tableau
- Site personalization framework

HACKATHONS

Horoscope Generator

- Used a RNN model
- Trained using a GPU

Anonymous email between IT buyers and vendors

- Wrote email proxy service that obfuscated the sender's address
- Won the hackathon

Latent engagement grouping in the Spiceworks community forums

- Generated graph of ~8M posts and their relationships
- Used page rank and clustering algorithms to calculate latent clusters
- Visualized using T-SNE

Hierarchical text clustering

- Used LDA to cluster a few hundred texts from a personal feed
- Visualized text clusters using pyLDAvis