Tyler Cornell

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EXPERIENCE

Staff Software Engineer / Head

Motive Interactive (Ad Tech), *San Diego*
May 2015 - PRESENT

Company Overview: Motive Interactive is an advertising platform focused on Mobile CPA/CPI campaigns utilizing OpenRTB programmatic buying technologies and various publisher APIs for network integrations.

Developer Responsibilities:

- Serve as primary platform architect for a multi-region DSP with an OpenRTB bidder, handling over 80k QPS with -1ms response times on AWS (4 regions).
- Develop publisher integration solutions, including REST API
- Built and maintained Motive's web properties for intelligent traffic arbitrage on landing pages.
- Designed and developed ETL systems for large-scale data processing for reporting and bidder use.
- Develop enhanced real-time application monitoring systems
- Developed a DSP admin UI portal for campaign setup, reporting, and audience management.
- Created CI/CD workflows for automated testing and deployment.
- Managed Kubernetes orchestration system and automated deployments of microservices/apps.
- Integrated server-to-server with various attribution and DMP platforms for data ingestion and tracking.
- Implemented machine learning models on the bidder developed by data scientists.
- Developed internal reporting and campaign management APIs for programmatic integrations.

Technologies & Tools: **Go, Python**, **JavaScript**, **TypeScript**, **PHP**, React, **AWS** (*Redshift, Lambda, Kinesis, EC2, S3, Elasticsearch, CodeDeploy, CloudWatch*), Travis CI, Prometheus, Grafana, **Kubernetes**, Helm, kubectl, Docker, **Redis**, Aerospike, **PostgreSQL**, **MySQL**, ScyllaDB, Protobuf, gRPC, **Linux**, Apache Spark, Hadoop, **Next.js**.

Lead/Product Responsibilities:

- Host daily standups and drove the engineering roadmap.
- Conduct code reviews and delegated tasks to developers.
- Collaborate on system architecture designs.
- Worked with management and stakeholders to draft PRDs and technical specifications.
- Met bi-weekly with stakeholders for new feature requests.
- Investigated market opportunities and drove weekly sprints using Scrum methodologies.
- Created pitch decks for investors and worked with attorneys on patent filings.
- Collaborated with data scientists to develop a machine learning platform consuming terabytes of data for modeling.

Accomplishments:

- Leadership in Technical Design: Led the design and implementation of a proprietary DSP, handling up to 80,000 requests per second at peak with sub ms response time, with a dynamic campaign management system and reporting/monitoring capabilities.
- Cost Efficiency: Reduced AWS costs by $30,000 monthly, achieving a 50% reduction.
- Sustainable Solutions: Developed a suite of internal tools still in use nearly a decade later.

Software Engineer

ShareTV / TV Tropes, *San Diego*
DEC 2013 - JAN 2015

ShareTV: An online community and entertainment platform providing comprehensive TV show guides, episode summaries, and fan discussions.

TV Tropes: A user-generated encyclopedia of narrative devices and storytelling patterns found across various media, including TV shows, movies, books, and video games.

- Developed data ingestion scripts using various TV/movie APIs.
- Scraped websites for additional data not available via APIs.
- Contributed to a Kickstarter project that raised over $100k for TV Tropes.
- Consolidated and revamped outdated TVTropes code
- Migrated Monolithic Servers from Windows to Linux and behind Nginx Load Balancers.

- Migrated news feature to WP with custom theming.

Technologies & Tools: Linux, Nginx, PHP, HTML, CSS, JavaScript, Perl

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EDUCATION

SUNY Alfred, NY
AAS Computer Information Systems (2010 -2013)