COLLIN BURGER

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📍 Los Angeles / World Wide Web

Technical leader with a decade of experience scaling products to deliver media to hundreds of millions of users. Passionate about providing solutions with the best product experience in mind.

WORK EXPERIENCE

GIPHY

Principal Engineer | 2023 – 2024

Held broad technical oversight of the engineering organization. Advised and led cross-team engineering efforts while retaining prior responsibilities as tech lead.

- Led the architecture of the real-time data stream system to log billions of search requests per day via Kafka. Coordinated with the Data Infrastructure and SRE teams to provide a self-service solution that enabled developers to build business critical products like trending content and API consumer rate-limiting.
- Refactored the core video processing systems to use a custom Scala wrapper of FFmpeg. Updated codecs and encoding settings yielded tens of thousands of dollars saved per month in cloud storage and CDN bandwidth costs.
- Served on the engineering steering committee that identified and planned long-term initiatives to alleviate organizational pain points, inconsistencies, and bottlenecks. Themes for projects included the consolidation of CI/CD pipelines across microservice deployments and increasing consistency of observability and alerting to improve the on-call experience.
- Produced data pipelines for moderation data with Redshift materialized views, Spark batch jobs, and Tableau dashboards to assist the Trust & Safety division with DSA-compliant reporting.

Tech Lead, Content Tools | 2020 – 2023

Technical lead of media ingestion, processing, storage, moderation, curation, and delivery systems. Worked closely with the Editorial, Trust & Safety, and Moderation teams to build and maintain bespoke content management systems to accelerate their workflows.

- Led a multi-quarter effort to design and deliver a new in-house moderation CMS built on Django, Celery, and React. Collaborated extensively with Trust & Safety and Moderation teams to provide a solution that achieved the highest levels of content safety for 3rd-party content distributors.
- Drove a cross-team CDN project to enable the configuration and execution of A/B testing search algorithms. Bucketing users into experiment groups at the edge while maintaining high cache hit ratios enabled the Search team to test on millions of API search sessions daily.
- Served as technical project manager on a collaboration with Meta to build a custom API product to provide users with media suggestions that aligned with their interests and intent. The product presented massive scale challenges as it was a critical part of Facebook user communication features.

Tech Lead, Content Engineering | 2016 – 2020

Technical lead for media handling systems and products. This era of massive growth for GIPHY brought a challenge to acquire increasing amounts of content which required extensive restructuring of our media processing approaches.

- Oversaw the centralization of the metadata collection and moderation pipeline into a cohesive system that scaled to over 500 thousand tasks per day. Unified disparate systems into a single Celery application that enabled the frequent adjustment of automated decision-making flows.
- Built a novel CMS for the content acquisition team to efficiently process entire video series and films and intelligently transform them into short clips based on shot change detection and caption data using FFmpeg via Kubernetes workers.
- Led the backend development of user-facing GIF creation tools. Collaborated closely with frontend developers to efficiently handle different media processing tasks server-side versus client-side depending on edit operation and file types.

Engineer | 2015 – 2016

Joined the API team to restructure the media processing pipeline. Designed and implemented systems to handle the increasing requirements of different media formats for GIPHY's growing list of API clients.

Hacker in Residence | 2014 – 2015

Built internal tools to analyze and process long-form video into GIF-appropriate clips.

EDUCATION

B.S. + M.S. in Electrical and Computer Engineering
Carnegie Mellon University
2009-2014

SKILLS

Scala/Java

Python

PostgreSQL/MySQL/NoSQL

AWS/GCP

FFmpeg

Fastly

Datadog

Tableau

Docker/Kubernetes

Django

React

INTERESTS

Tennis

PC Gaming

Guitar

Doggies

Greek Yogurt