Yash Gugale

609 9th Ave, Apartment 5S, New York, NY - 10036

🌐 www.yashgugale.com ✉ yashgugale@gmail.com ☎ 765-772-8466

Senior Software Engineer at Peloton Interactive

EDUCATION

University of Illinois, Gies College of Business   **Champaign, IL**
MBA - Leadership, Entrepreneurship, Digital Marketing   *Jan '22 - May '25*

Purdue University, Computer Graphics Technology   **West Lafayette, IN**
MS - Computer Graphics Technology (Minor: CIGP), GPA : 3.86/4.0   *Aug '18 - May '20*

EXPERIENCE

Peloton Interactive   **New York, NY**
Senior Software Engineer, Peloton Media Engineering   *April '23 - Present*
- Building API templates using FastAPI, DynamoDB, MongoDB, JWT auth, ISTIO OAuth2 proxy, AWS X-ray, Opentelemetry, PyTest, Ruff linting and pre-commit hooks to spin new microservices within minutes.
- Building several microservices for Akamai tokens, digital signage, notification system, media library, media engine, docs, subtitle service, M3u8 linter (library and API), etc and performing load testing.
- Creating analytics and monitoring dashboards using Cloudwatch, Datadog, NPAW, Touchstream, etc.
- Building several internal UIs for job processing, media library, notification service, etc. using Svelte.
- App for Peloton instructors to create new classes/workouts/playlists using LLM & media processing backend.
- Conducting workshops on DyanmoDB, OpenAPI, video streaming, architecture designs & on-call rotations.

Samsung Electronics America   **Plano, TX**
Engineer III ← E. Manager ← Engineer II, Software Process Engineering   *June '20 - April '23*
- OTT, VOD and Live streaming for TV Plus applications on TV, Mobile, Web & Samsung Free.
- HLS live channel workflows using AWS Medialive, MediaPackage, Mediastore & MediaTailor.
- Setting up development workflows with Jira boards, sprints, creating run-books, API design docs and proper escalation process for incidents, engineering recruiting interviews and QA support.
- Implemented ad pre-fetching for improving ad revenue and monitoring ad metrics.
- Leading a small engineering team with 2 direct reports in the US and 6 in India.
- Built an EPG framework for ingesting JSON, XML, Gracenote based EPGs for parsing, extracting, validating and uploading EPG to Samsung TV Plus Server and containerizing it using Docker.
- Created a FASTAPI based REST backend for AWS Channel Assembly, Mediapackage, using Boto3 API, creating logs for analytics, Serverless lambda deployments, & parallel ad requests to reduce VOD load times.
- AWS Mediapackager for Widevine, Playready and multi-drm Live and VOD stream generation for player implementation (Google Widevine certification).
- Created MRSS specification and system architecture design to build a fully automated FFMPEG & AWS Mediaconvert based VOD ingestion pipeline.

Isha Institute of Inner Sciences   **McMinnville, TN**
Video Streaming Engineer (Volunteer)   *Nov '22*
- Creating multi-audio tracks in different languages for various VOD assets using JW Player APIs and systems.
- Setting up Mediaconvert based assembly workflows and deployment/management using JW Player.

Purdue University   **West Lafayette, IN**
Research Assistant   *Jan '19 - June '20*
- Using D3.js to visualize Indiana's Education and Workforce data (showcase at www.yashgugale.com)

Samsung Electronics America   **Plano, TX**
XR Engineer   *June '19 - August '19*
- Hardware acceleration of volumetric video frames & volumetric video rig design and simulation.

PROJECTS

VR, Graphics & Shader (CGT 520, 521, 581, CS 535, 590)   *Fall '18-Spring '20*
- OpenGL demos using shaders, physically based rendering, non-photo realistic rendering, SSAO, deferred shading, tangent space normal mapping, parallax mapping, occlusion query, conditional rendering, ray casting, instancing and other programmable pipeline features, OBJ & MTL Object loading.

ADDITIONAL

- Programming : Python, C, C++, C#, Javascript, Svelte, MongoDB, DyanamoDB, Redis, Supabase.
- Tools : AWS Media Services - MediaConvert, MediaLive, MediaPackage, Mediastore, MediaTailor, Lambda, S3, Eventbridge Trigger, Docker, Kubernetes, Chrome Extensions, Github Actions (CI/CD).
- Other : HLS, DASH, DRM (PR & WV), FastAPI, Selenium.