Vasant Kumar Mogia

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EDUCATION

MADHAV INSTITUTE OF TECHNOLOGY AND SCIENCE   Gwalior, MP
Bachelor of Technology   Expected Graduation – May 2027
Major in Information Technology
Relevant Coursework: Software Engineering; Operating Systems; Algorithms; Computer Networks; DBMS

DELHI PUBLIC SCHOOL VIJAIPUR   Guna, MP
Applied Sciences & Computer Applications   Graduated May 2023

PROJECTS

WATCHERX
JavaScript/TypeScript, Express, NodeJS, GCP, Docker, Firebase, HTML/CSS
- Enabled **secure file uploads** by integrating **Firebase Authentication** and generating signed URLs via **Cloud Functions.**
- Orchestrated a **Pub/Sub–triggered Cloud Run FFmpeg pipeline** to transcode videos to **360p** in /processed-videos.
- Logged **processing status** and **metadat**a in **Firestore**, allowing users to **track and access** processed videos.

AWS SERVERLESS EMAIL MARKETING
AWS (Lambda, SES, S3, EventBridge, IAM), Python, HTML/CSS
- Built a **serverless email marketing system** on **AWS**, removing the need for manual setup.
- Streamlined **template/contact** merging in **Lambda functions**, slashing **email prep time by 90%**—from hours to minutes.
- Scheduled campaigns with **EventBridge** and enforced least-privilege access via **IAM** for enhanced security.

URL COMPRESSOR
Go, Gin, Redis
- Developed a **URL shortener** in **Go** with **Gin** and **Redis**; handled **10k requests at ~400ms** avg latency with **100%** success.
- Implemented **per-user scoped links** using **user IDs**, ensuring data isolation and fast concurrent lookups.
- Exposed concise **RESTful** endpoints with robust **JSON validation** and testable responses using **curl**.

TECHNEWS API
JavaScript, Express, NodeJS, PostgreSQL
- Delivered **real-time tech news** via a serverless **RESTful API**, handling **1k+ daily requests** on a free-tier server.
- Enabled **developer adoption** through **RapidAPI** integration and **Insomnia**-tested endpoints.
- Managed **500+ articles** with **PostgreSQL** for efficient, **real-time data** retrieval under resource constraints.

TECHNICAL SKILLS

Languages: Python, C++, Go, JavaScript/TypeScript, SQL, HTML/CSS
Frameworks & Tools: NodeJS, Express, Gin, Docker, Git
Cloud & Databases: AWS, GCP, Firebase, PostgreSQL, Redis
Platforms: Linux, Windows

CERTIFICATIONS

DATACOM SOFTWARE DEVELOPMENT JOB SIMULATION – FORAGE   Feb 2025
- Participated in a **virtual simulation** modeling **Datacom's SDLC process**.
- Analyzed a **web app**, diagnosed **performance issues**, and proposed **long-term feature enhancements**.
- Identified and **resolved bugs affecting UI performance**.

EXTRACURRICULAR

ASSOCIATION FOR COMPUTING MACHINERY   Gwalior, MP
Technical Team Member   Oct 2024 – Present
- Designed and delivered **hands-on technical workshops**, authoring **sample code** and **step-by-step tutorials** for **50+ attendees**.
- Led **prototyping and development** of group projects, conducting **code reviews and docs**.
- Coordinated with other **student chapters** to co-host **inter-collegiate technical events**, increasing visibility and outreach.