Jaipur, Rajasthan
India 302017

KUSH KUMAR SHARMA

thekushsharma@gmail.com

WORK EXPERIENCE   5+ YEARS

Lead Engineer   **Gojek**   **Aug 2019 – Present**

- Leading an ETL tool Optimus which is a performant workflow orchestrator for data transformations, data modeling, and data quality management. It is horizontally scalable with high availability using raft for consensus. Ships with its own scheduler and executor but also modular to support custom and community-supported like Airflow.
- Worked on Identity and Access Proxy typically deployed in front of web-facing applications and is capable of authenticating and optionally authorizing access requests. It supports http1.1/http2/http2c transports, enriching requests, and managing authorization rules using yaml files.
- Worked on the data lineage service that will provide details about where data originates and moves around during transformations and consumption. This requires the collection of metadata from several services, processing it, and generating lineage graphs that can be queried in near real-time.
- Worked on data quality service that verifies duplicate data and latency between ocean and warehouse pipelines. Apache beam was used to process messages stored in datastores to compare timestamps/hashes and the result gets sunk to a time-series database.
  # Go, Java, Terraform, Kafka, Airflow, Kubernetes, BigQuery, Apache Beam, Parquet, GRPC, GCP

Founder   **Moonware**   **Jan 2019 – Aug 2019**

- Started a novel community that had more than 6k+ novels, 7M+ chapters indexed, and crawled 500+ sites for latest updates that required processing & filtering before listing.
- Load balanced on Nginx with database in MariaDB. Queries were handled by Laravel and WordPress along with React and jQuery on the frontend.
- Page & query cache on Redis. Crawler data is queued on RabbitMQ which then gets processed with workers written in PHP.
  # React, Laravel, RabbitMQ, NodeJs, WordPress, Nginx, Ansible, Docker, Redis

Software Engineer   **Sumo Digital**   **Oct 2017 – Dec 2018**

- Worked on a AAA game title Team Sonic Racing for publisher Sega implementing gameplay, physics, and weapon mechanics.
  # C, C++

Software Engineer   **Autodesk**   **Jan 2017 – Oct 2017**

- Worked on the implementation of stroke fonts used to print text through CNC machines.
- Improved mesh generation performance of 3D models by 30% and various sketch features in the product Autodesk Fusion 360.
- Researched to enable the support of lattice generation and cloud solver required for generative designs.
  # C++, Autodesk Fusion 360

Game Programmer   **GlaxoSmithKline**   **Dec 2015 – Dec 2016**

- Developed 2D platformer, a promotional game for the milk product Horlicks as a contract job.
  # Android, Java, libGDX, Box2D, OpenGL, Lwjgl

TECHNICAL EXPERIENCE

Projects *Source available on Github

- **Prime Party** (2020): It's a chrome extension for watching Amazon Prime Videos together in sync with friends. It synchronizes video playback and adds group chat. 20K+ active users.
  # Nodejs, Socketio, Redis, Javascript, Nginx

- **Servo*** (2020): Server management tool that can take backups of logs, files & databases to S3, clean logs older than X days and can serve as SMTP relay for sending mail via AWS SES.
  # Go, SMTP, AWS SES

- **Linux Kernel Module*** (2016): Mouse driver that can control pointer from userspace to kernel space. It is inserted as a kernel module that can be controlled by writing to a specific dev/<charfile>.
  # C, Linux

- **ProfessorK*** (2015): A platformer game that specializes in realistic physics using box2d. Collisions, recoil, projectiles, particle effects, lights are simulated in real-time. Won *2nd place out of 8000 entries*.
  # Android, Java, iOS, PC, Linux, RoboVM, libGDX, Box2D, OpenGL, Lwjgl

- **Kush Micro News*** (2013)**:** A WordPress plugin used to provide short excerpts instead of whole posts in a blog, like a news bulletin. Live on more than *600+ sites worldwide*.
  # PHP, WordPress, jQuery, MySQL, SVN

EDUCATION

Mesra, India	**Birla Institute of Technology**	**2014 - 2017**

- Master of Computer Application (MCA) in Computer Science, GPA: 8.7
- Coursework: Numerical and Statistical Methods, Discrete Mathematics, Data Structures and Algorithms, Operating System, Computer Organization and Architecture, Computer Graphics, Automata Theory, Compiler Design, Software Engineering, Artificial Intelligence, System Programming, Soft Computing

Jaipur, India	**Jaipur National University**	**2011 - 2014**

- Bachelor in Computer Application (BCA), Gold Medalist, GPA: 8.2
- Coursework: Digital Electronics, C/C++ Programming, Programming Principles, Databases, Optimization Techniques, Computer Networks, Java, PHP, Electronic Resource Planning

ADDITIONAL AWARDS

- **Second Prize, Hack-4-fun:** Competition conducted by GlaxoSmithKline & HackerEarth for developing an android game, out of 8000 people all over India, which landed me a 1-year contract with the company.
- **Seventh Prize, IndiaHacks:** Hackathon by HackerEarth for developing a game, out of 11000 people all over the world.
- **Gold Medal, Bachelor in Computer Application:** Graduation from Jaipur National University.

LANGUAGES AND TECHNOLOGIES

- Programming Languages: Go, Java, C++, PHP, Python, JavaScript
- Databases: Postgres, MySql, Redis, BigQuery, MongoDB
- Web: HTML5, CSS3, NodeJs
- Serve: Nginx, Docker, RabbitMQ, Kafka, Kubernetes, Terraform
- Libraries & Frameworks: React, WordPress, Bootstrap, Socket.io, jQuery, Laravel, OpenGL, libGDX, Unity
- Tools: Git, Perforce, Jira, Airflow

LINKS

- **LinkedIn:** https://linkedin.com/in/thekushsharma
- **GitHub:** https://github.com/kushsharma
- **Twitter:** https://twitter.com/_kusharma