Jaipur, Rajasthan
India 302017

KUSH KUMAR SHARMA

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WORK EXPERIENCE   6+ YEARS

Lead Engineer   **Amazon**   **Jan 2022 – Present**

- Leading two teams of 10 engineers for making Pricing in Amazon look as competitive as possible. Initiatives involve providing discounts by Amazon if Sellers keep the product price higher than the competition.
- Improving customer experience to find an alternate product if the featured product is not the best available option to buy.
  # Java, AWS, Docker and mostly Amazon internal tech

Lead Engineer   **Gojek**   **Aug 2019 – Jan 2022**

- Led a team of 3 engineers for an ETL tool Optimus, which is a performant workflow orchestrator for data transformations, data modeling, and data quality management. Horizontally scalable, highly available using raft & ships with its own distributed scheduler/executor. Supports existing schedulers like Airflow. Currently powers the data warehouse pipeline for 6+ companies.
- Building an Identity and Access Proxy deployed in front of web-facing applications capable of authenticating and optionally authorizing requests. It supports http1.1/http2/http2c transports, enriching requests, and managing authorization policies. Deployed for more than 8 services in the company.
- Built a data lineage service that helps 500+ engineers discover data in the company. This requires the collection of metadata from several services, processing it, and generating lineage graphs that can be queried in near real-time.
- Built a data quality service that verifies duplicate data and ingestion latency between petabyte-scale ocean and warehouse pipelines.
  # 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.
  # React, PHP, Laravel, RabbitMQ, NodeJs, WordPress, Nginx, Ansible, Docker, Redis, MariaDB

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**

- Implemented support for 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

Software Engineer   **GlaxoSmithKline**   **Dec 2015 – Dec 2016**

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

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

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. 25K+ 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

LANGUAGES AND TECHNOLOGIES

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

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.

LINKS

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