Jaipur, Rajasthan
India 302017

KUSH KUMAR SHARMA

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WORK EXPERIENCE

Product Engineer   **Gojek**   **Aug 2019 – Present**

- Working on an ETL tool Optimus that takes billions of records from database, process transformations over it using BigQuery and stores it back to database periodically for analysis.
- Worked on data lineage service of Gojek that will provide details about where data originates and moves around during various transformations and consumption.
- Worked on data quality service that verifies duplicate data and latency between data 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 which had more than 6k+ novels and 7M+ chapters indexed.
- Crawled more than 500+ sites for latest updates every few min, process, filter and list them.
- The server was 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.
- Implemented 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 specific dev/<charfile>.
  # C, Linux

- **ProfessorK*** (2015): A platformer game 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

- **Slomo Jumper*** (2015)**:** Fast-paced casual game specializes in implementing depth of field shadow system.

Custom shaders for maximum performance that synchronizes with music. The game was built to run at 60 FPS with a hardware of 800 MHz single core, 256MB ram android smartphone.
Android, Java, iOS, PC, libGDX, Box2D, Box2dLights, 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

- **Beatbox** (2013)**:** Provides a jamming platform similar to Launchpad for music creation. Reads audio file pitch data and converts into arbitrary numbers that can be used as a visualizer.
  # NodeJS, Socketio, Websockets, SoundmanagerJS, Javascript, jQuery, PHP, HTML5

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, VB.NET, 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: Golang, C++, Java, PHP, C, Python
- Databases: Postgres, MySql, Redis, BigQuery, MongoDB
- Web: HTML5, CSS3, JavaScript, 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