

WORK EXPERIENCE

Product Engineer	Gojek	Aug 2019 – Present
<ul style="list-style-type: none">Working on an internal batch tool for ETL pipeline that takes billions of records from database, process transformations over it using BigQuery and stores it back to database periodically for analysis.Working on data lineage service of gojek that will provide details about where data originates and moves around during various transformations and consumption.Working on data quality service that verifies data duplicacy and latency between data ocean and data lake pipelines. <p># Java, Go, Terraform, Kafka, Airflow, Kubernetes, Docker, Etc, BigQuery, Apache Beam</p>		
Founder	Moonware	Jan 2019 – Aug 2019
<ul style="list-style-type: none">Started a novel community (rankmynovel.com) which has more than 6k+ novels and 7M+ chapters indexed.Crawls more than 500+ sites for latest updates every few min, process, filter and list them.The server is load balanced on Nginx with database in MariaDB. Queries are 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. <p># React, Laravel, RabbitMQ, NodeJs, Wordpress, Nginx, Ansible, Docker, Redis</p>		
Software Engineer	Sumo Digital	Oct 2017 – Dec 2018
<ul style="list-style-type: none">Worked on a AAA game title Team Sonic Racing for publisher Sega.Implemented gameplay, physics and weapon mechanics. <p># C, C++</p>		
Software Engineer	Autodesk	Jan 2017 – Oct 2017
<ul style="list-style-type: none">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. <p># C++, Autodesk Fusion 360</p>		
Game Programmer	GlaxoSmithKline	Dec 2015 – Dec 2016
<ul style="list-style-type: none">Developed 2D platformer, a promotional game for the milk product Horlicks as a contract job. <p># Android, Java, libGDX, Box2D, OpenGL, Lwjgl</p>		

TECHNICAL EXPERIENCE

Projects *Source available on Github

- Prime Party** (2020): Prime Party is a chrome extension for watching Amazon Prime Videos together in sync with friends. It synchronises video playback and adds group chat.
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.
Golang
- Linux Kernel Module*** (2016): Mouse driver that can control pointer from userspace to kernel space. Gets inserted as a kernel module in Linux that can be controlled by writing to specific dev/<charfile>.
C, Linux
- Dead Assassin*** (2016): A platformer game, specializes in implementing replay system. All the actions are recorded and can be simulated again in a non-deterministic physics engine. Won *7th place out of 11000 entries*.
Android, Java, iOS, PC, Linux, RoboVM, libGDX, Box2D, Kryonet, OpenGL, Lwjgl

- **Professork*** (2015): A platformer game, specializes in realistic physics using box2d. Collisions, recoil, projectiles, particle effects, lights are simulated in real-time with great optimization. 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 field shadow system. Custom shaders for maximum performance that syncs with music. The game can run at 60 FPS with a hardware of 800 MHz single core, 256 MB 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
<ul style="list-style-type: none"> • 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
<ul style="list-style-type: none"> • 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
- Databass: 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