

## WORK EXPERIENCE

<b>Product Engineer</b>	<b>Gojek</b>	<b>Aug 2019 – Present</b>
<ul style="list-style-type: none"><li>Working on an internal batch tool for ETL pipeline that takes millions of records from database, process transformations over it using BigQuery and stores it back to database periodically for analysis.</li><li>Working on data lineage service of gojek that will provide details about where data originates and moves around during various transformations and consumption.</li><li>Worked on data quality service that verifies data duplicacy and latency between data ocean and data lake pipelines.</li></ul> <p># Java, Go, Python, Kafka, Airflow, Kubernetes, Docker, Etc, BigQuery, Apache Beam</p>		
<b>Founder</b>	<b>Moonware</b>	<b>Jan 2019 – Aug 2019</b>
<ul style="list-style-type: none"><li>Started a novel community (rankmynovel.com) which has more than 6k+ novels and 7M+ chapter index.</li><li>Crawls more than 500+ sites for latest updates every few min, process, filter and list them.</li><li>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.</li><li>Page &amp; query cache on Redis. Crawler data is queued on RabbitMQ which then gets processed with workers written in PHP.</li></ul> <p># React, Laravel, RabbitMQ, NodeJs, Wordpress, Nginx, Ansible, Docker, Redis</p>		
<b>Software Engineer</b>	<b>Sumo Digital</b>	<b>Oct 2017 – Dec 2018</b>
<ul style="list-style-type: none"><li>Worked on a AAA game title <i>Team Sonic Racing</i> for publisher Sega.</li><li>Implemented gameplay, physics and weapon mechanics.</li></ul> <p># C, C++</p>		
<b>Software Engineer</b>	<b>Autodesk</b>	<b>Jan 2017 – Oct 2017</b>
<ul style="list-style-type: none"><li>Worked on the implementation of stroke fonts used to print text through CNC machines.</li><li>Improved mesh generation performance of 3D models by 30% and various sketch features in the product Autodesk Fusion 360.</li><li>In research, enabled the support of lattice generation and cloud solve required for generative designs in Mac.</li></ul> <p># C++, Autodesk Fusion 360, React</p>		
<b>Game Programmer</b>	<b>GlaxoSmithKline</b>	<b>Dec 2015 – Dec 2016</b>
<ul style="list-style-type: none"><li>Developed 2D platformer, a promotional game for the milk product Horlicks as a contract job.</li></ul> <p># Android, Java, libGDX, Box2D, OpenGL, Lwjgl</p>		

## TECHNICAL EXPERIENCE

### Projects \*Source available on Github

- 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 *7<sup>th</sup> place out of 11000 entries*.  
# Android, Java, iOS, PC, Linux, RoboVM, libGDX, Box2D, Kryonet, OpenGL, Lwjgl
- Karen AI\*** (2015): An NLP chatbot, inspired by Joseph Weizenbaum's classic Eliza program.  
# Java, CoreNLP
- 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 *2<sup>nd</sup> 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 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): WebApp that handles multiple clients at once and 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, Canvas

## EDUCATION

<b>Mesra, India</b>	<b>Birla Institute of Technology</b>	<b>2014 - 2017</b>
<ul style="list-style-type: none"> <li>• Master of Computer Application (MCA) in Computer Science, GPA: 8.7</li> <li>• 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</li> </ul>		
<b>Jaipur, India</b>	<b>Jaipur National University</b>	<b>2011 - 2014</b>
<ul style="list-style-type: none"> <li>• Bachelor in Computer Application (BCA), Gold Medalist, GPA: 8.2</li> <li>• Coursework: Digital Electronics, C/C++ Programming, Programming Principles, Databases, Optimization Techniques, Computer Networks, Java, VB.NET, PHP, Electronic Resource Planning</li> </ul>		

## 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: C, C++, Java, PHP, Go, Python
- Database Programming: MySql, Redis, BigQuery, MongoDB, InfluxDB
- Web designing languages: HTML, CSS, Javascript
- Server programming & Tools: Apache httpd, Nginx, NodeJs, Docker, RabbitMQ, Kafka, Kubernetes
- Web Libraries & Frameworks: React, WordPress, Bootstrap, Socket.io, jQuery, Laravel
- Designing: Adobe Photoshop, Illustrator, After Effects, Autodesk Fusion 360
- Game development: Box2d, OpenGL, libGDX, Unity
- Android SDK, Git & SVN, Perforce, Jira, Docker, Airflow

## LINKS

- **LinkedIn:** <https://linkedin.com/in/thekushsharma>
- **Github:** <https://github.com/kushsharma>
- **Twitter:** <https://twitter.com/thekushsharma>