# **WORK EXPERIENCE**

Founder Moonware Jan 2019 – Present

- Started a novel community (rankmynovel.com) which has more than 5k+ novels and 4M+ chapter index.
- 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.
  - # React, Laravel, RabbitMQ, NodeJs, Wordpress, Nginx, Ansible, Docker, Redis

Software Engineer Sumo Digital Oct 2017 – Dec 2018

- Worked on an 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 various mesh and sketch features in the product Autodesk Fusion 360 which is used to draw and manipulate models in 3D environment.
- In research, enabled the support of lattice generation and cloud solve required for generative designs in Mac. # C++, Autodesk Fusion 360, Javascript, React

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

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

#### LINIK

• LinkedIn: https://linkedin.com/in/thekushsharma

• Github: https://github.com/kushsharma

Twitter: https://twitter.com/thekushsharma