Plot 38 Vishwa Vidyalaya
Mahal Road NRI Jagatpura JP
Rajasthan IN 302017

KUSH KUMAR SHARMA

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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

Jaipur, India   **Jaipuria Vidyalaya**   **2009 - 2011**
- Senior Secondary Education(12th), CBSE, Score: 87%
- Secondary Education(10th), CBSE, Score: 70%

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 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

- **Karen AI*** (2015): An NLP chatterbot, inspired by Joseph Weizenbaum's classic Eliza program.
  Java, CoreNLP, XML

- **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 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

- **Minimal Noter*** (2014)**:** Android Application used to write down notes simple and fast.
  Android SDK, Nineoldandroid, SQLite, Java

- **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 & 9000+ downloads*.
  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 visualizer data in the background. Works in real-time using long polling for instant feedback.
  NodeJS, Socketio, Websockets, SoundmanagerJS, Javascript, jQuery, PHP, HTML5, Canvas

- **Cosmos** (2013): WebApp for room chat, handles multiple clients at once using long polling. NodeJS, Socketio, Websockets, Javascript, jQuery, PHP, HTML5

WORK EXPERIENCE

Software Engineer Intern   **Autodesk**   **2017**
- Improvement of mesh features in Autodesk Fusion 360.
- Tech: C, C++, Qt, Jira, Perforce, Autodesk Fusion 360, Boost

Game Developer   **GlaxoSmithKline**   **2016 - 2017**
- Developed ProfessorK promotional game for the milk product Horlicks as a contract job.
- Tech: Android, Java, RoboVM, libGDX, Box2D, OpenGL, Lwjgl

ADDITIONAL AWARDS

- **Second Prize, Hack-4-fun:** Competition conducted by GSK & HackerEarth for developing an android game, out of 8000 people all over India.
- **Seventh Prize, IndiaHacks:** Hackathon by HackerEarth for developing a game, out of 11000 people all over the world.
- **First Prize, Paper Presentation:** In Jaipur National University for the year 2013 on "Piezoelectric Current."
- **Gold Medal, Bachelor in Computer Application:** Graduation from Jaipur National University.
- **Conducted 2-day workshop**: On game development in Birla Institute of Technology.

LANGUAGES AND TECHNOLOGIES

- Programming Languages: C, C++, Java, VB.Net, PHP, Python
- Database Programming: MySql, Oracle DB, MongoDB, XML, NoSQL
- Web designing languages: HTML, CSS, SASS Javascript, Ajax, JSON, Canvas
- Server programming: Apache httpd, Nginx, NodeJs
- Web Libraries & Frameworks: WordPress, Bootstrap, Socket.io, CodeIgnitor, AngularJS, jQuery, Django
- Designing: Adobe Photoshop, Illustrator, After Effects, Blender, Autodesk Fusion 360
- Game development: Box2d, OpenGL, libGDX, Unity
- Android SDK, Git & SVN, Perforce, Jira, Data miners, Compiler design
- Responsive Real-time applications, Amazon EC2, Docker, Crawlers, Microservices, RestAPIs
- Beginner: OpenCV, CoreNLP, WebRTC, Linux Kernel Drivers, Spring, Qt

LINKS

- **LinkedIn:** https://linkedin.com/in/thekushsharma
- **Github:** https://github.com/kushsharma
- **Twitter:** https://twitter.com/thekushsharma
- **Blog:** http://softnuke.com