

## EDUCATION

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<b>Ranchi, 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>		
<b>Jaipur, India</b>	<b>Jaipuria Vidyalaya</b>	<b>2009 - 2011</b>
<ul style="list-style-type: none"><li>• Senior Secondary Education(12th), CBSE, Score: 87%</li><li>• Secondary Education(10th), CBSE, Score: 70%</li></ul>		

## TECHNICAL EXPERIENCE

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### 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 *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, 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 *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
- **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 *700+ 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. Real-time updates with no delay using long polling. 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

<b>Software Engineer Intern</b>	<b>Autodesk</b>	<b>2017 - Current</b>
<ul style="list-style-type: none"> <li>• Improvement of mesh features in Autodesk Fusion 360.</li> <li>• Implementation of Generative design in Autodesk Fusion 360.</li> </ul>		
<b>Lead Game Developer</b>	<b>GlaxoSmithKline</b>	<b>2015 - 2016</b>
<ul style="list-style-type: none"> <li>• Developed ProfessorK promotional game for the milk product Horlicks as a contract job.</li> </ul>		

## 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, SQLite, XML, Microsoft SQL
- Web designing languages: HTML, CSS, Javascript, Ajax, JSON, Canvas
- Server programming: Apache, 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
- Responsive web designs, Real-time applications, Data miners, Compiler design
- 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>