# KUSH KUMAR SHARMA

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#### **EDUCATION**

## Ranchi, 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 7<sup>th</sup> place out of 11000 entries.
  - Android, Java, iOS, PC, Linux, RoboVM, libGDX, Box2D, Kryonet, OpenGL, Lwigl
- 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, Lwigl
- 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**

### **Software Engineer Intern**

#### **Autodesk**

2017 - Current

Working on the improvement of mesh features in Autodesk Fusion 360.

## **Lead Game Developer**

#### GlaxoSmithKline

2015 - 2016

• Developed ProfessorK promotional game for the milk product Horlicks as a contract job.

## **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, Codelgnitor, AngularJS, jQuery, Django
- Designing: Adobe Photoshop, Illustrator, After Effects, Blender, Autodesk Fusion 360
- Game development: Box2d, OpenGL, libGDX, Unity
- Android SDK, Git & SVN
- · 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