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SUMMARY

I am enthusiastic about research and development with latest technologies and build custom tools, utilities and automation scripts. I am experienced in building cross platform device-agnostic multiplayer applications with enterprise standards and leveraging latest development in the field of VR/AR and computer vision.

COMPUTER SKILLS

Languages

- Proficient in: C#, C++, python and C

- Comfortable with: Unity shader, nodeJS, and Java

- Familiar with: PHP, SQLite, and MySQL

Software

- Game engines: Unity3D and Unreal

- IDE: Visual Studio, Xcode, Android Studio, Netbeans and BlueJ

- Frameworks(API/SDK/etc.): WebRTC, Tokbox, MS-Hololens, ARCore, Structural Sensor, Leap Motion, HTC Vive, Oculus rift, Photon Unity Networking(PUN), VoIP, Unity Networking(UNET), Vuforia, Kudan, OpenCV, FFMPEG, CSCore, NAudio, OpenGL, Panda3D and Lame

- Misc: ICE and signaling server, WPF, DLL, socket programming, Git vcs, VoIP, visual SVN, freeNAS, Charles Debugger, Dependency Walker, JustDecompile, Audacity, Photoshop, Ricoh theta 360, Samsung 360, 360fly, Moverio, Vuzix, realware HMT-1, Jupyter notebook.

EXPERIENCE

Staff Engineer   Sep'17 - present

Imaginate Software pvt. Ltd.Hyderabad

- I am responsible for the architecture and development of "Assist" (product), which is being used by clients like – UTC, Ford, ABB and others.

- Setup and maintain the infrastructure for live streaming between users in compliance with firewall restrictions.

- Developed new features for annotations and "feature tracking" on live stream with openCV. User can also record live stream using FFMPEG libraries.

- Handled research and development on Hololens among list of other devices supported by "Nuspace" (platform-agnostic platform for virtual conferencing and meeting).

- Developed module for recording 3D VR session, which records all actions, events, conversation, content sharing etc. Extremely useful in case of collaborative session which can be reviewed and replayed at later time.

- Worked upon screen sharing feature that allows the user to present their desktop screen to other users across any platforms.

- Wrote C# wrappers for native dlls to render out office documents files (i.e. DOCX and XLSX) along with PDFs inside VR application in real time.

Lead Software Imagineer   Nov'16-Aug'17

XR Labs pvt. Ltd. Chennai

- Developed interactive visualization app for pattern and color painting on wall, using OpenCV and nodeJS. Complete interaction with application was handled by leap motion alone.

- Developed kiosk application for immersive VR-experience of endangered wildlife species on HTC Vive.

- Developed VR, and AR application for training, repair and inspection of mechanical machinery such as engine valve adjustment, servicing of tractor, electric scooter etc.

- Worked on markerless tracking, annotations and virtual meeting space – multiplayer experience with VoIP as a POC.

- Wrote custom parser for loading Obj and Fbx files in runtime inside Unity.

Game Programmer   Jan'16-Nov'16

All in a days play Pvt. Ltd. Mumbai

- Build VR-simulation android app for wing suit diving. The player movement was controlled using gyroscope sensor and implemented checkpoint based reward system in game.

- Developed local multiplayer game with fusion of sport and fight for steam platform. The game had max option of 2v2 using XBOX or PS controllers. Also implemented reactive AI bot player for single player mode.

- Worked on physics based construction game for PC. Brainstormed and developed several components such as – level designs, ride attachments, building constraints, GIF encoder/editor, in game procedural level, and leader board with histograms.

- Prototyped simulation of planetary motion and placement of new star bodies into the system, without causing collision or disturbance in the current system.

EDUCATION & ACHIEVEMENTS

Rustamji Institute of Technology, Gwalior   2012-2016

- Bachelor of Engineering in Information Technology
  CGPA – 7.33

Computer Vision and Image Analysis   Nov'18-Dec'18

- Microsoft course on edx.org
  Aggregate – 85% [Certificate]

Introduction to computing with Java   Sep'14

- Hong Kong University of Science and Technology on edx.org
  Aggregate – 90% [Certificate]

ACHIEVEMENTS AND HONORS

Achievements and Qualifications

- My game was selected among top 20 games among 100s of other at Pocket Gamer Connect Bangalore 2016.

- Qualified for ACM-ICPC Asia regional consecutively 3 years, ranking under 200 among more than 1500 teams.

- Cleared the qualification round of Google Codejam 2014 worldwide from more than 23,000 participants.

- Among top 200 in India Hack 2014 from 3400(approx.) participants on Hackerearth.

- Completed course on "Introduction to computing" by Indian Institute of Technology, Bombay (IIT-B) with 97% marks on EDX.

- Won 2nd prize in reverse engineering at Techwizard'13.

- Secured 2nd position in college level quiz on World environment day.

Extra-curricular Activities

- Delivered guest talk at UXIndia 2017 Bangalore on following topic "Platform agnostic UX/UI for AR/VR application". [Follow]

- Given workshop on augmented reality(AR) application organised by Apple Developer group (ADG) at Vellore Institute of Technology(VIT), Chennai. [Follow]

- Student member of Association of Computing Machinery.

- President of the RJITGEEK Codechef campus chapter of RJIT BSF Academy College.

- Organized and delivered many programming sessions at college level as being part of RJITGEEK community.