CHETHNA KABEERDOSS

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SKILLS

- *Languages:* C, C++, Python, OpenGL, MEL, RSL(Renderman Shading Language)
- *Software:* Houdini, Maya, Unity, Nuke, Mari, ZBrush, Photoshop, Premier Pro, Audition, Illustrator
- *Operating system:* Mac OSX, Windows, Linux
- Version Control: SVN, Perforce, GitHub
- Project tracking: Jira

EDUCATION

Texas A&M University, College Station, TX — *Aug 2013 –Dec 2015(expected)*
Master of Science in Visualization/ Computer Graphics — *GPA 3.8*
Amrita School of Engineering, Bangalore, India — *Aug 2006 –May 2010*
Bachelor of Technology – Electronics and Communication — *GPA 3.1*

PROJECTS

Thesis — *August 2015 – present*

- Developing a GPU-Based Real-Time Ray Tracer & Path Tracer, for a Virtual reality experience using the Oculus Rift. (C++)
- Writing the shaders in CUDA with Optix framework.
- Developing a pluging to connect the gyrometer in the Oculus Rift to the Real-Time Ray Tracer's camera.

Effects & Pipeline lead, Rigging Co-Lead, — *Jun 2014 – Aug 2014*
Industry course with DreamWorks Animation (Accepted into the SIGGRAPH 2015 Dalies)

- Created a 30 animation short in collaboration with artists from DreamWorks Animation.
- Created all pipline tools (Python & Bash scripting) and some procedural rigs (Maya, Python & MEL).

REVELANT EXPERIENCE

Graduate Research Assistant, Texas A&M Dept. Of Visualization-TX,USA — *Sept 2014 - Present*

- Assisting NSF funded Mobile Augmented Reality research project (Unity, C#, MATLAB & FaceLAB).
- Developing an application for optimized integration of real and virtual elements in mobile AR based on user-attention and reducing visual clutter of labeled objects through interactive eye tracking.

3D Content Creation Associate, NEXREF Technologies-TX,USA — *May 2015 - Aug 2015*

- Creating 3D content for the augmented reality (Unity, Maya, Houdini, & Photoshop).
- Creating generic unity (C# & Java-script) scripts for user interaction with the 3D objects.
- Helped enhance the mobile AR application for optimized integration of real and virtual elements.

Programmer Analyst, Cognizant Technological Solutions-Bangalore, India — *Jul 2010 – Jun 2013*

- Developed (Core Java & Selenium), enhanced and maintained scripts as an automation engineer using open source tools for ecommerce portals of retail companies.
- Gathered requirements from onshore client, analyzed and documented it.
- Onsite-Offshore communication was on a day-to-day basis, gave status reports.
- Managed offshore team of 4, delegated work and ensured timely completion of tasks.

RELEVANT COURSES TAKEN

Physically Based Simulation Basic *(VIZA 659/ CPSC 659)*

- Particle generator (C++ & OpenGL) , Springy mesh & Cloth,Rigid Body (Java & Processing) , Flocking simulation (Java & Processing), Collision detection (C++ & Java)

Advanced Physically Based Simulation *(VIZA 679/ CPSC 689)*

- Fluid Simulation, Rigid body constraints, Featherstone's Algorithm, Crowd simulation

Image Synthesis *(VIZA 656/ CPSC 647)*

- Coded ray-tracer(C++ & OpenGL)

Geometric Modeling *(VIZA 675/ CPSC 645)*

- Parametric and spline representations of curves and surfaces and their uses, Basic differential geometry of curves and surfacesmodeling topic, Subdivision surfaces

Rendering & Shading *(VIZA 616)*

- Advanced rendering and shading techniques for the attainment of a desired visual effect; Shading language - RSL, attainment of visual realism, integration of rendering and modeling tools.

TALKS

- Lightning talk at Grace Hopper Conference 2015 | Merits of mobile eye tracking for Augmented Reality
- Micro talk at Augmented Reality world expo, 2015 | Mobile eye tracking for Augmented Reality

ACHEIVEMENTS

- 2015 Sony Pictures IPAX Sande Scoredos Scholarship
- 2015 CG Student Awards winner - People's Choice Highly Recommended
- 2014 Joseph Reeves Endowment Scholarship
- 2013 Visualization Department Strategic Scholarship
- 2010 placed first for presentation on Soft skills at Cognizant Technology Solutions
- 2009 "Best Presenter Award" for paper presentation on "Novel Ring Resonator based Biosensor for Cancer Detection", at the Sixth National Student Conference organized by IEEE UVCE, Bangalore.