Ganesh Belgur Ramachandra

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Experience

- **MPC Film** — Bangalore, India
  Software Developer - R&D — *Feb 2017 - Present*
  https://www.mpc-rnd.com/
  - **Furtility**: Developed and refactored in-house tool for creating photorealistic hair, fur, feathers and other fibre like clothing
  - **Haystack**: Developed a new in-house tool based on Furtility for previewing scenes with high density vegetation in Fabric Engine
  - **FurtilityX**: Making Furtility compliant with a new pipeline using Universal Scene Description data
- **Xentrix Studios** — Bangalore, India
  Developer - Pipeline — *Jul 2016 - Feb 2017*
  http://www.xentrixstudios.com/
  - Developed and optimized in-house C++ plug-ins for Autodesk Maya
  - Improvements to studio's CG pipeline and aiding artists in troubleshooting bugs
- **EduTech Solutions (P) Limited** — Bangalore, India
  Intern — *Oct 2014 - Apr 2015*
  - **Database Management**: Worked with a team of developers on designing the database schema for managing, storing, retrieving of quizzes and user information which included handling of media files for the Phase I development of an Android app called DLM (Definitive Learning Methodology) under Mr. Kundendu Kumar Sengupta, Director of EduTech Solutions (P) Limited

Projects and Publications

- **Minimalistic Raytracer**: A ray tracer implemented based on Peter Shirley's minibook series on writing a raytracer.
- **DreamWorks FX Challenge**: A simulation of sparks flying in a projectile trajectory that collides with obstacles and splinters.
- **DreamWorks Steer Quest**: A flocking simulation of a herd of sheep avoiding static and dynamic obstacles in a scene to reach a designated destination.
- **Aliensplline**: A personal, static, technical blog site that is written from scratch using HTML, Sass, Javascript and powered by Jekyll for quick content management.
- **Grammar Error Detection Tool**: A noval approach based on NLP for detecting grammatical errors in a text. A technical paper was presented on this approach at the Jawaharlal Nehru Technological University, Hyderabad which was published by Springer under the title, 'Proceedings of ICCII 2017, Springer - Advances in Intelligent Systems and Computing'.
- **Target Identification**: A student project requiring an implementation of an SAX parser to read through 7 million lines of an XML based drug bank data (https://www.drugbank.ca/) to search and push targets associated with a drug into a database.

Education

- **Amrita School of Engineering** — Bangalore, India
  Bachelor of Technology in Computer Science and Engineering with Distinction — *Aug. 2012 – Aug. 2016*
  - **Courseware**: Computer Organisation and Architecture, Operating Systems, Data Structures and Algorithms, Database Management Systems, Computer Networking, Computer Graphics, Automata theory and Computer Language Engineering, Net-centric Programming, Software Engineering;

Skills and Accomplishments

- **Programming Languages**: C, C++, Python, Lua, Fabric Engine's KL, HTML, CSS, Sass, Javascript;
- **Technologies and Frameworks**: OpenGL, Maya, Katana, Houdini, Jekyll, Blender, Unity;
- **Honor and Award**: Won the third place in Stay Late And Code event, a hackathon which was held at college; Successfully completed a Diploma Course in Visual Effects;
- **Volunteering**: Served as a Student Volunteer at the ACM SIGGRAPH Asia 2017, Bangkok; Volunteer/ Mentor at GAFX 2018, Bangalore; Organised hackathons at college
- **Languages**: English (Professional working proficiency); Kannada (Mother tongue);