VISUALIZATION
TEXAS A&M UNIVERSITY

Rigger

Required Skills

Level 1
- Produces rigs and deformations for biped characters that meet standard performance expectations for animated short or mid-ground characters in a feature.
- Produces rigs and deformations for quadruped characters that meet standard performance expectations, specifically for the forequarters, spine, and tail.

Level 2
- Constructs facial rigs that combine solid user interface development with a deformation and shape driven approach to creating an expressive performance.
- Develops character rigs that provide a high level of animator control (can include controls for squash and stretch, IK/FK switching, and Bi-Quad switching).
- Writes scripts in Mel or, preferably, Python for basic rig components.

Level 3
- Develops specialized rigs for characters that have unusual performance requirements, such as being highly deformable, an unusual body structure, or lots of dangly bits.
- Combines different modes of animation (keyframe, motion capture, procedural, etc.) in a single rig with smooth blending and control.
- Designs muscle systems that include complex deformations.
- Writes scripts for full rig setups and simple tools.

Level 4
- Constructs systems and APIs (typically in C++) to manage large-scale pipeline/efficiency issues or perform complex behaviors.

What courses should I take?
- ARTS 111   - ARTS 212   - VIST 271
- ARTS 112   - VIST 170   - VIST 284
- ARTS 115   - VIST 270

Vizzers in the Industry
Megha Davalath
Character Technical Director, DreamWorks Animation

Megha came to the Viz Department after receiving her BS in Computer Science from the University of Texas at Austin in 2008. While with the Viz Lab, she was inspired by a presentation given by DreamWorks' Terry Boylan about the technology behind the rigging and animation of the gelatinous B.O.B in *Monsters Vs. Aliens*. This gave her the idea for her thesis, in which she constructed an Isosurface-Based Character Rigging System, with Boylan as a member of her thesis committee. Megha graduated in 2011 and joined the DreamWorks team as a Character Technical Director. During the next three years, she worked on body rigs and developed hair pipelines for T*he Rocky & Bullwinkle Short*, *Me & My Shadow*, *Kung Fu Panda 3*, *and Monkeys of Mumbai*. In 2014 she transitioned into her current role as a Hair Specialist in the Character FX Department for the upcoming feature *Trolls*. With this team, she works to provide efficient solutions to the complex process of character hair styling and the progression from modeling to styling, rigging, animation, and final simulation tests.