Technology Intern – Summer Associate

Walt Disney Animation Studios is seeking a technology intern for its 2012 Summer Intern session. In this project-based internship, you will gain a unique hands-on experience that will expand your creative horizons and benefit you throughout your entire career.

Depending on student availability, projects will span 8 to 12 weeks at our studio in Burbank, CA.

Project Description

Title: Local Contrast Preserving Gamut Mapping

Colors with high brightness and high saturation that can be produced by digital cinema projectors cannot be reproduced on film. A global color gamut mapping compresses these colors so that they fall within the film gamut, but negatively impacts the separation of colorful elements. A local color gamut mapping algorithm helps preserve local details and contrast, but can introduce artifacts with motion image content. The selected intern will develop a local algorithm incorporating the temporal domain for picture stability. An implementation will be tailored specifically to the transformation from digital cinema to motion picture film and should handle both hand drawn and computer-generated imagery without introducing visually objectionable artifacts.

Minimum Qualifications

• Computer graphics or video processing background
• Understanding of colorimetry and color appearance models
• Experience in developing and implementing gamut mapping algorithms
• Proficiency in C++ and Matlab

Education

• BS in imaging science, computer science or electrical engineering
• Currently enrolled in a graduate program in imaging or color science