Matt McCrory

Please describe your area of expertise and tell me about a few projects you are working on.

Having worked at DreamWorks Animation, University of Chicago, and Argonne National Lab, I bring a diversity of industry and academic experience to Northwestern Visualization. While the work that I’ve done for research institutions has been largely technical, the years I spent working as an artist at DreamWorks helped me develop an eye for aesthetics. Both are critical to crafting effective visualizations.

My team is currently working on an exciting mix of interactive tools and animations. For researchers who are interested in interactively exploring and quantifying their data, we’re developing a cloud-based framework that will offer researchers a number of advantages over more traditional approaches. This new cloud-based workflow enables researchers to interact with complex datasets from anywhere and using virtually any device as the visuals will be rendered in our data centers on high-end graphics servers and streamed in real time to researchers’ workstations, laptops, tablets, phones, etc. And for researchers interested in utilizing illustrations or animations for education and outreach, we’re building an animation pipeline that utilizes graphics chips (GPUs) in our newest compute cluster to accelerate the rendering process and reduce the time (and cost) to generate images/animations.

What is your favorite part of your job?

I’ve always been passionate about science and art, so having the opportunity to combine those interests and to work with talented staff who share those passions is one of my favorite parts of this job. Working with Northwestern’s researchers and knowing that the work my team and I do supports some of the world’s most advanced research is also incredibly fulfilling.

How can you help scientists and investigators at Northwestern better communicate their work?

Imagery in all forms has a way of reducing complex ideas into something more readily understood. Creating a visual that tells a story, however, can be challenging. Film and game studios employ fundamental elements like light, color, form, and composition to direct viewers’ eyes and elicit emotional responses. For researchers at Northwestern, knowing the target
audience is critical when setting visual direction. The visuals that communicate most effectively with one’s academic peers may look very different than those that communicate most effectively with the general public. My team and I help Northwestern’s researchers disseminate their work to a range of audiences either by advising/consulting or through the creation of illustrations, animations, and interactive applications. In either case, we lean heavily on our industry experience and frequent consultation with the researcher to ensure that his or her work is communicated accurately and in a way that resonates with its intended audience.

Why did you choose to work at Northwestern?

I joined Northwestern in 2008 with the desire to contribute, if even in a small way, to the advancement of science. Crafting the beautiful imagery of DreamWorks Animation’s films was fulfilling in its own right, but I felt (and still feel) strongly that the biggest challenges humanity faces will only be solved through a better understanding of the world around us. Northwestern’s researchers are making great strides to that end and I’m grateful to be a part of it.

Is there anything else I should know?

If you have any questions about or services or would like to meet to discuss a project, please email me at m-mccrory@northwestern.edu.