The 2008 Visualization Technical Achievement Award

David Laidlaw

The 2008 Visualization Technical Achievement Award goes to David Laidlaw, Brown University, in recognition of outstanding technical work in the area of multi-valued data visualization.

David participated in the formative stages of the field of visualization as a co-architect of the first commercial scientific visualization system, AVS. This early work formed a strong foundation for his subsequent academic career. David has also used his interest and talents in painting, art and design to enhance the presentation of complex information. This award recognizes David’s technical work on methods for visualization of vector and tensor fields. He has been able to identify and create new techniques that are technically innovative yet can still be applied to clinical problems. The IEEE VGTC is pleased to award David Laidlaw the 2008 Visualization Technical Achievement Award.

Biography

David H. Laidlaw is a professor of computer science at Brown University. He received his PhD from Caltech in computer science, where his research centered around how to extract geometric geometric information from volumetric magnetic resonance imaging data and how to optimally acquire such data. He then did three years of postdoctoral research in the Caltech Division of Biology applying image acquisition results to help advance research in developmental neurobiology.

Dr. Laidlaw has long been interested in the application of computational and visualization tools to science. Starting in high school, he has developed collaborations with researchers in many disciplines, including biophysics, developmental neurobiology, evolutionary biology, medical imaging, neuropathology, orthopedics, art, cognitive science, remote sensing, and fluid mechanics. Applications from other disciplines give a real-world direction to computational research and are also compelling because they can provide concrete answers to questions about how our world works. Through these collaborations, he has been studying how computers can help scientists, developing new computational applications, and improving our understanding of the strengths and weaknesses of these applications.

Some research problems of particular interest to Prof. Laidlaw are visualization and modeling of multivalued multidimensional imaging data, comparisons of virtual and non-virtual environments for scientific tasks, and applications of art, perception, and cognition to visualization.

Dr. Laidlaw has published more than 70 peer-reviewed journal and conference papers, has served on or co-chaired dozens of conference committees, and has been an associate editor of IEEE Transactions on Visualization and Computer Graphics. He has been a recipient of several best-poster, best-case-study, and best-panel awards from IEEE Visualization, two best-student-poster awards from ACM SIGGRAPH, and placed first with a collaborative submission to the 2008 NSF/Science International Science and Engineering Visualization Challenge.

Award Information

The IEEE VGTC Visualization Technical Achievement Award was established in 2004. It is given every year to recognize an individual for a seminal technical achievement in visualization. VGTC members may nominate individuals for the Visualization Technical Achievement Award by contacting the awards chair, Bill Lorensen, at http://tab.computer.org/vgtc/.