



# CineGrid International Workshop 2015 Speaker Information

Workshop organized by Pacific Interface, Inc.  
Sponsored by CineGrid, a non-profit organization headquartered in California  
Hosted by Calit2's Qualcomm Institute at UC San Diego  
Location: Calit2 auditorium, 1st Floor, Atkinson Hall, UCSD, La Jolla, California  
Date: December 9-11, 2015

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## **Daisuke ANDO**

PhD Student, Graduate School of Science and Technology  
Keio University, Japan  
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Mr. Daisuke Ando is a Ph.D. student of Graduate School of Science and Technology, Keio University, Japan. He took a master's degree of Computer Science in March 2013 and Business & Commerce in March 2014, Keio University. His research interest is cloud storage and media transfer in the field of computer science and human resource management and organizational behavior in the field of business & commerce. Currently, he is visiting LAVA (Laboratory for Advanced Visualization and Applications), University of Hawaii for conducting a joint research using SAGE2.

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## **Andrew ALLEN**

Lead Audio Researcher, SonicArts R&D  
Qi at the University of California, San Diego (UCSD)  
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Andrew Allen is the lead audio researcher at SonicArts R&D of the Qualcomm Institute at UCSD. He received his M.A. in composition from the Eastman School of Music and his PhD in computer music from UCSD, where he also taught undergraduate lectures on acoustics, the music of Asia, and video game music. His current research focuses on developing interactive physics-based audio systems.

Allen has developed many novel DSP solutions, including two notable real-time interactive systems, RURATAE, an engine for modeling object and instrument vibrations, and Aerophones, a collaboration with Microsoft Research to create 2D virtual wind instruments.

He has presented research at GameSoundCon, the New York City Electroacoustic Music Festival, the Linux Audio Conference, the Acoustical Society of America, and SIGGRAPH.

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## **Mount V. ALLEN**

Director of Operations  
San Francisco Jazz Organization  
[mallen@sffjazz.org](mailto:mallen@sffjazz.org)

Mount Allen introduced the concept of non-higher education performing arts venue participation in the Research Education Network during the Featured Technology Session of the International Association of Assembly Managers Performing Arts Center Conference. Since that introduction in New York City in 2012, he has worked to integrate advanced networking technology into the industry.

Presently, Mount is the director of operations for the San Francisco Jazz Organization. He opened the SFJAZZ Center in 2013, which is now a first adopter of the Research Education Network technology in a non-academic environment.

Prior to joining SFJAZZ, Mount was on the opening team of Jazz at Lincoln Center in New York City, the world's first venue specifically designed for jazz. Before this appointment, Mount was on the opening team for the New Jersey Performing Arts Center, the nation's sixth largest performing arts center.

In recognition of the value of higher education, between the openings of SFJAZZ and Jazz at Lincoln Center Mount returned to Lehigh University as a director of scheduling. Earlier in life, he had graduated from Lehigh with a bachelor's degree in organization management, and a master's degree in educational leadership with a focus on higher education public assembly venue management. He also holds the professional designation of Certified Facilities Executive (CFE).

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**Maxine D. BROWN**

Director

Electronic Visualization Laboratory (EVL) and Software Technologies Research Center (STRC)

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As the director of EVL at the University of Illinois at Chicago, Brown is responsible for fundraising, outreach, documentation, and promotion of its research activities. Her research interests include computer graphics, scientific visualization, collaboration, human-computer interfaces, high-performance computing, and international network infrastructure.

Brown has been active for many years in the ACM SIGGRAPH organization, and in SIGGRAPH and ACM/IEEE Supercomputing conferences; she recently served as general co-chair for IEEE Visualization 2015. In recognition of her services to UIC and the community at large, Brown is a recipient of the 1990 UIC Chancellor's Academic Professional Excellence (CAPE) award; the 2001 UIC Merit Award; and the 1998 ACM SIGGRAPH Outstanding Service Award.

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**Cicero Inacio DA SILVA**

Coordinator, Telehealth Program

Federal University of São Paulo (UNIFESP)

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Cicero Inacio da Silva is an associate professor focusing on digital media, and coordinates the Telehealth program at the Federal University of São Paulo (UNIFESP). Da Silva also coordinates the Software Studies group in Brazil and the Walkingtools Lab, both in partnership with the University of California, San Diego (UCSD) and the City University of New York (CUNY).

Da Silva has served as digital media curator for the Brazilian Digital Culture Forum (Ministry of Culture/RNP), and received an honorary mention from Digital Communities at the Prix Ars Electronica in 2010. He was a researcher on the Working Group of Advanced Visualization Applications for the National Education and Research Network (RNP), a visiting professor at UCSD from 2006 to 2010, and a visiting scholar at Brown University (2005). Da Silva is one of the organizers of CineGrid Brasil.

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**Cees DE LAAT**

Professor, Informatics Institute

University of Amsterdam

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Professor de Laat chairs the System and Network Engineering (SNE) research group in Informatics Institute of the Faculty of Science at University of Amsterdam. Research in his group includes optical and switched networking and workflows for processing of big data in petascale e-Science applications, Semantic Web to describe e-infrastructure resources, information complexity, authorization architectures and systems security, and privacy of information in distributed environments.

Prof. de Laat serves on the Lawrence Berkeley Laboratory policy board on matters regarding ESnet, is co-founder of the Global Lambda Integrated Facility (GLIF), founder of GRIDforum.nl/ and founding member of CineGrid. His group is (or was) part of such European Union projects as SWITCH, CYCLONE, ENVRI, EuroBrazil, Geysers, NOVI, NEXTGRID, EGEE, and others. He is a member of the advisory board of the Internet Society Netherland, and the Scientific Technical Advisory Board of SURF Netherlands. A snapshot of his scientific career is available at: <http://delaat.net/>

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**Jason DANIELSON**

Manager of Media Solutions

NetApp

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Jason Danielson's professional career is highlighted by innovative firsts in the development of video technology and solutions. In 1983, he was product manager at Picture Element Limited on the first on-line non-linear editor. In 1988, he was a co-founder at Digital F/X, where his product team won an Emmy for the development of the video workstation.

Danielson joined Silicon Graphics (SGI) in 1993, where he developed key solution partnerships for both production workstations and video servers. He also led a product management team that developed IPTV and broadcast video servers, as well as an early digital asset management system. He joined Omneon (now Harmonic) in 2004, where he launched the MediaGrid, opened up markets for Omneon in news production and shared edit, and built the strongest video server ecosystem in the industry.

At NetApp, Danielson manages media and entertainment solution marketing, including solution, ecosystem, and business development. He holds a bachelor's degree from Stanford University.

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**Paul DEBEVEC**

Research Professor, University of Southern California (USC)

Chief Visual Officer, USC Institute for Creative Technologies.

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Paul Debevec is a research professor at the University of Southern California and the chief visual officer at USC's Institute for Creative Technologies. From his 1996 PhD at UC Berkeley, Debevec's publications and animations have focused on techniques for photogrammetry, image-based rendering, high dynamic range imaging, image-based lighting, appearance measurement, facial animation, and 3D displays.

Dr. Debevec is an IEEE Senior Member and co-chair of the Academy of Motion Picture Arts and Sciences' (AMPAS) Science and Technology Council. He received a Scientific and Engineering Academy Award® in 2010 for his work on the Light Stage facial capture systems, used in such movies as *Spider-Man 2*, *Superman Returns*, *The Curious Case of Benjamin Button*, *Avatar*, *Tron: Legacy*, *The Avengers*, *The Avengers*, *Oblivion*, *Gravity*, and *Maleficent*. In 2014, Debevec was profiled in *The New Yorker* magazine's "Pixel Perfect: the scientist behind the digital cloning of actors" article by Margaret Talbot. He also recently worked with the Smithsonian Institution to scan a 3D model of President Barack Obama.  
<http://www.pauldebevec.com/>

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**Thomas A. DeFANTI**

Research Scientist, Calit2, University of California, San Diego

Distinguished Professor Emeritus, Computer Science, University of Illinois at Chicago

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Thomas A. DeFanti, PhD, has been an internationally recognized expert in computer graphics since the early 1970s. His research is funded by the NSF SCOPE (UCSD) and SENSEI (UIC) projects, the NSF Pacific Research Platform (UCSD, UCB). He is currently co-manager of the UCSD Integrated Digital Infrastructure project.

Dr. DeFanti is the recipient of the 1988 ACM Outstanding Contribution Award and was appointed an ACM Fellow in 1994. He shares recognition—along with Electronic Visualization Laboratory Founding Director Daniel J. Sandin—for conceiving the CAVE virtual reality theater in 1991.

Striving for two decades to connect high-resolution visualization and virtual reality devices over long distances, he is a founding member of GLIF (Global Lambda Integrated Facility), a group that manages international switched wavelength networks for research and education.

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**Gary DEMOS**

Founder, Image Essence  
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Demos has been a pioneer in the development of computer-generated images for use in motion pictures, digital image processing, and image compression. He was a founder of Digital Productions (1982-1986), and was awarded an Academy of Motion Picture Arts and Sciences (AMPAS) Scientific and Engineering Award in 1984 along with John Whitney Jr. *For the Practical Simulation of Motion Picture Photograph By Means of Computer-Generated Images*. He also founded Whitney-Demos Productions (1986-1988), DemoGraFX (1988-2003), and Image Essence LLC, a privately owned technology company (2005 to present).

Gary Demos is the recipient of the AMPAS 2005 Gordon E. Sawyer Oscar for lifetime technical achievement. He is actively involved in the ASC Technology Committee and has worked on the Academy of Motion Picture Arts and Sciences's ACES project. He has presented numerous papers at SMPTE, given a SMPTE Webinar, is a SMPTE Fellow. In 2012, he received the SMPTE Digital Processing Medal for that year. Demos is the inventor listed on nearly one hundred patents.

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**Bill FEIGHTNER**

Chief Technical Officer  
Colorfront  
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Feightner began his career as technical director of Compact Video, before moving on to similar roles at Laser Edit and Composite Image Systems (CIS). He was co-founder and, most recently, CTO and executive vice-president of technology at EFILM Digital Laboratories (part of Deluxe Entertainment Services Group Inc.). At Laser Edit, Feightner created a live, real-time, multilayer VFX compositing system, and continued this pioneering approach at CIS, where he helped to develop the 2K pin-registered telecine system that revolutionized the process of interactive image compositing for feature films.

At EFILM his innovations included new software for digital laboratory calibration; image processing and image management software; end-to-end, multi-site, collaborative workflow procedures and software; the world's first fully-digitally timed DI pipeline on *We Were Soldiers* (2002); and the world's first 4K DI finish on *Spiderman 2* (2004). He was also responsible for the workflow on *Extremely Loud & Incredibly Close* (2011), the first U.S. feature to shoot and post using the ARRIRAW format.

During his time at EFILM, Feightner worked closely with Colorfront, harnessing the company's technology on many projects. Feightner is currently the chief technical officer for Colorfront.

Feightner has earned multiple awards. In 2007, he received a technical achievement award from the Academy of Motion Picture Arts and Sciences (AMPAS) for the creation of a Digital Color Separation process for the archival of motion pictures. He also has received an Emmy Award for special effects work on the TV series *Moonlighting*, plus a Monitor Award for the opening segment of *The Magical World Of Disney*. In 2013, SMPTE awarded Feightner the 2013 Technicolor/Herbert T. Kalmus Medal, which recognizes outstanding contributions to the highest standards of quality and innovation in motion picture post-production and distribution services.

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**Maciej GLOWIAK**

Poznan Supercomputing and Networking Center  
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Maciej Glowiak's technical background entails network software engineering and parallel computing. His professional research interests include high-capacity networks, network monitoring, new protocols and future Internet, new multimedia technology research, UHD video hardware and software development, among other areas.

Glowiak graduated from Poznan University of Technology in 2003 and then began working for the Poznan Supercomputing and Networking Center. He is involved in a number of Polish and European network endeavors including the Future Internet Engineering project (known as GEANT), as well as such multimedia projects as VISIONAIR. Since 2008 he has been involved in building UHD 3D nodes in Poland, currently focusing on new 8K 3D appliances.

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**Gregory W. HARPER**

President  
Harpervision Associates  
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Greg Harper is president of Harpervision Associates, a firm dedicated to the development and implementation of cutting-edge technology for businesses purposes. He is also co-founder of Gadgetoff, an invitation-only event in New York City that gathers leading science and technology innovators. Harper is currently focusing on wireless personal information devices, mobile phones, the next generation of ultra-high definition (4K) telepresence and collaborative systems, distance learning, digital distribution of media, and digital signage.

Harper is also the chief technology officer of Neuhouse, an innovative approach to shared office space, with the first of 25 sites worldwide now open in New York City. He is a longtime advisor to leading Wall Street investment banks, helping them deploy worldwide rich media and collaborative systems as well as providing research information on cutting edge technologies. Harper serves additionally as a senior strategic advisor to the chairman of Trans World Entertainment, where he has been a key player in the development of the company's digital media strategies.

As designer of systems ranging from distance learning to digital media production, Harper has been awarded 22 U.S. patents and has five pending. He serves on the boards of the Institute of Audio Research (IAR), and of Troxell Communications. His many TV appearances (including Bloomberg TV) and conference presentations can be seen at [www.harpervision.com/](http://www.harpervision.com/).

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**Ted HARRINGTON**

Executive Partner  
Independent Security Evaluators  
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Ted Harrington drives thought-leadership initiatives for Independent Security Evaluators, a Baltimore, Maryland-based independent security firm "dedicated to aggressive defense strategies through advanced science... [including] improving clients' overall security posture, protecting digital assets, hardening existing technologies, and securing infrastructures." Harrington is a sought-after speaker, presenting at high-profile conferences in a range of industries, including media and entertainment, hospitality, finance and others. He was recently named one of *San Diego Metro* magazine's 40 Under 40 "outstanding San Diegans," where he was both one of the youngest inductees in the class as well as the only honoree from the field of information security.

Harrington is one of the organizers of IoT (Internet-of-Things) Village, the popular new hacking concept and event focused on connected devices, as well as an organizer of SOHOpelessly Broken, the first ever router-hacking contest at the esteemed security conference DEF CON. Harrington holds several special appointments, including to the California Governor's Cyber Security Task Force, at University of Southern California (Entertainment Technology Center, Project Cloud Security Team), as co-chair of the HTNG Door Lock Security Working Group, at Cyber California, and several others. He holds a bachelor's degree from Georgetown University.

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**Paul J. HEARTY**

Vice President, Technology Standards Office  
Sony Electronics Inc.  
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Dr. Paul Hearty has worked nearly 30 years in the arena of television/cinema technology and standards. A leader in development and standardization of the ATSC HDTV system, he was awarded an Emmy and recognized for contributions to four others.

Dr. Hearty has served on the board and executive committee of SMPTE and is a Fellow of that organization. He sits on the boards of ANSI and CineGrid. Dr. Hearty is also a technology advisor to the Consumer Electronics Association (CEA), chair of its technology and standards council, and chair of its interfaces subcommittee. He serves on the Society of Cable Telecommunications Engineers Engineering committee and its digital video subcommittee, as well as on a number of other standards committees.

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**Laurin HERR**

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President

Pacific Interface, Inc.

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Laurin Herr is founder and president of Pacific Interface, an international consulting company that facilitates research and business between Japan, America and Europe. Herr is also one of the co-founders of CineGrid.

For more than 30 years, Pacific Interface has been analyzing trends in media, computing, video/graphics, displays and networking applications on behalf of clients wishing to explore new markets. In addition to strategic consulting and business development services, Pacific Interface provides a wide range of specialized services to organize and manage research collaborations, technical symposia, technology showcases, and media events.

Concurrent with his activities at Pacific Interface, from 1992 to 2004 Herr also held senior management positions at such Silicon Valley digital media technology companies as SuperMac, Radius, Truevision and Pinnacle Systems. From 1982 to 1992, he was the official liaison to Japan for ACM SIGGRAPH.

After receiving his B.A. degree from Cornell University, Herr studied Japanese intensively in the U.S. and Japan, and pursued additional graduate studies at Cornell and at Sophia University in Tokyo. He holds a sixth-degree black belt in the martial art, Aikido.

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**John HESS**

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Network Engineer

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John Hess is a network engineer at the Corporation for Education Network Initiatives in California (CENIC), a non-profit organization that seeks to advance education and research statewide by providing the world-class network essential for innovation, collaboration and economic growth.

His interests include interconnection, network performance, and data movement. Hess joined CENIC in 2010.

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**Soichiro IWAI**

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Student

Keio University, Tokyo, Japan

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Iwai is a fourth-year undergraduate student at Keio University. He is currently studying in Dr. Kunitake Kaneko's research group, which focuses on new architectures and applications of networked media infrastructure. His research interest is personalized recommendations of digital content using a catalog system.

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**Jon KARAFIN**

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Head of Light Field Video

Lytro

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Jon Karafin is a production executive with expertise in technology innovation for live action cinema, VFX post-production, light field imaging, VR and AR (augmented reality). With a proven track record of new product development increasing profitability through technology and innovation, Karafin is responsible for successfully delivering technology and content for several of the all-time highest grossing feature films, including Peter Jackson's *The Hobbit: The Desolation of Smaug*, Michael Bay's *Transformers 3* and Tim Burton's *Alice in Wonderland*.

Currently, he's tackling his latest challenge as the head of light field video at Lytro. With a strong technical background in live action cinema, VFX and stereoscopic post-production, Karafin is leading a team to bring light field cinema technology to market. The company states that its light field video camera will give directors unprecedented creative control during post-production.

Prior to Lytro, Karafin was the vice president of production technology and senior scientist at RealD, and director of production and operations at Digital Domain.

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**Hiroyuki KIMIYAMA**

Senior Research Scientist  
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Dr. Kimiyama joined NTT in 1990, initially researching video processing systems. He is currently studying wide-area distributed and parallel processing, and its applications. Dr. Kimiyama is a member of the ACM, the Institute of Electronics, Information and Communication Engineers (IEICE) of Japan and the Information Processing Society of Japan (IPSI).

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**Joshua KOLDEN**

Cinema Cloud Architect  
Studio Pyxis  
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Joshua Kolden is a pioneer of entertainment technology in Hollywood. A visual effects professional for more than 20 years, Kolden has credits in some of the most successful films of all time, including *Fight Club*, *The Golden Compass*, and *Priest*. In 2002, he started Crack Creative to apply leading-edge real-time technologies to the filmmaking process. The most well known of Crack Creative's innovations is the "virtual production" process originally created for James Cameron's *Avatar* in 2005.

Four years ago, Kolden launched Studio Pyxis, a production studio specifically designed to employ the latest filmmaking technologies, including cloud-based rendering, automatic pixel accurate camera tracking, online services, virtual production and many other tools. Currently, Kolden is a production technology consultant and the architect of the Cinema Content Creation Cloud, or C4, an open-source framework designed specifically for media production that harnesses distributed resources to provide scalable storage and computing, and remote collaboration.

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**Michal KRSEK**

Senior Researcher, CESNET  
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Krsek's main research activities focus on the Czech Republic's CESNET, including high-speed networks and suitable protocols, network interconnection, content delivery networks and multimedia archives. Wearing his commercial hat, Krsek leads business development activities in Stream Circle, cloud platform for linear TV channels over IP networks.

Krsek is the founder of PragueMediaNet, a network and applications infrastructure that interconnects academic, research, and industrial partners in media production and post-production. He is the author of a number of international research papers and participates in various network development groups, including IETF, RIPE (European IP Networks) and the Internet Society (ISOC). Krsek graduated from the Faculty of Applied Sciences at the University of West Bohemia.

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**Falko KUESTER**

Director, Calit2 Center of GRAVITY  
(Graphics, Visualization and Imaging Technology)  
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Falko Kuester is the Director of the Center of Interdisciplinary Science for Art, Architecture and Archaeology (CISA3) at the California Institute for Telecommunications and Information Technology (Calit2) and the Calit2 Professor for Visualization and Virtual Reality. Professor Kuester also directs Calit2's Center of Graphics, Visualization and Virtual Reality (GRAVITY), and holds appointments as professor in the University of California, San Diego, Jacobs School of Engineering's Structural Engineering as well as Computer Science and Engineering departments. Professor Kuester is the principal investigator on the IGERT-TEECH project for Cultural Heritage Diagnostics, funded by the National Science Foundation, and with his team is working on methodologies and techniques for cultural heritage diagnostics and preservation, including diagnostic and analytical imaging as well as visual and cultural analytics in collaborative digital workspaces that provide engineers, scientists, art historians and restorers, with a means to intuitively and

interactively explore historic artifacts. This research is creating the foundation for the emerging field of cultural heritage engineering, providing a means for researchers and the public alike to study cultural heritage and facilitate its preservation.

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**Linda LAW**

Artist

Art in the 5th Dimension

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Linda Law is a digital / holographic artist with a long history in 3D and education. Working in holography since 1975, she was the assistant director of the Center for Optics, Lasers and Holography at New York Institute of Technology (NYIT) from 1981 to 1986 when its Computer Graphics Lab was pioneering much of what is now accepted as standard practice in computer graphics. Her exposure to the experimental work in CG at NYIT at that early time opened her to the potential for digital holography and an array of many 3D technologies that she has been exploring since then.

In the early 90's, Law worked as a 3D animator for Simian Technologies Inc., creating animations for Digital Holograms. The process employed by Simian to create these holograms was essentially a light field approach that gave her a basic understanding of the light field way of envisioning 3D.

Since that time, Law has been working as both a digital artist and as an educator in these media. She is currently offering online classes in a spectrum of these new technologies under the title of "Tools for Creating in the 4th Dimension." This current course is intended as a foundation for what will be a series of advanced courses in 360-degree immersive video, digital holography and an array of other topics that will include augmented reality and virtual reality. Further information about these classes can be seen at: [www.artinthe5thdimension.com/](http://www.artinthe5thdimension.com/).

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**Louise R. LEDEEN**

Strategic Sales Executive, Sector and Cloud Services Specialist

IBM Global Alliance, NetApp

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Louise Ledeen's expertise is applying technology to the creative process. Her foundational work as a pioneering video artist and curator of technology-based art has led to her more recent endeavors at NetApp Inc. and Silicon Graphics including the development of groundbreaking tools and processes for digital content creation, media management, migration, restoration and archiving.

At NetApp, Ledeen is responsible for the development of hybrid cloud data and analytics workflows, as well as sector-specific VDI visualization and collaboration services with the IBM Cloud Business Unit and SoftLayer, an IBM company.

Prior to joining NetApp in 2007, Ledeen worked at Silicon Graphics (SGI) for 12 years where she pioneered the development of media solutions for broadcast news production; data management solutions for HD content creation; innovations for real-time 2K film scanning; and 4K digital intermediate workflows. Ledeen is a member of the Society of Motion Picture & Television Engineers (SMPTE), the Hollywood Post Alliance (HPA), Association of Moving Image Archivists (AMIA) and CineGrid.

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**Jason LEIGH**

Professor, Department of Information and Computer Sciences (ICS) and

Director, Laboratory for Advanced Visualization Applications (LAVA), University of Hawai'i at Mānoa (UHM)

Director Emeritus, Electronic Visualization Laboratory (EVL) and Software Technologies Research Center (STRC), University of Illinois at Chicago (UIC)

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Jason Leigh is a professor in the ICS department and director of LAVA at UHM. Previously, he was a professor of computer science and director of EVL and STRC at UIC. While at UIC, he was a Fellow of the UIC Institute for Health Research and Policy and held research appointments at Argonne National Laboratory and the National Center for Supercomputing Applications.

Dr. Leigh's research expertise includes large-scale data visualization, virtual reality, high-performance networking and video game design. His recent invention, the CAVE2 Hybrid Reality Environment, has been licensed to Mechdyne Corporation. In 2010, he initiated a new multi-disciplinary area of research



called human augmentics, which refers to the study of technologies for expanding the capabilities and characteristics of humans. His work has received widespread media coverage, including the Associated Press, *New York Times*, *Popular Science's* Future of, NOVA scienceNOW, and NSF Science Now, PBS and *Forbes*. Leigh also has taught classes in software design and video game design. In 2010, his video game design class enabled UIC to be ranked among the Top 50 video game university programs in the U.S. and Canada.

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**Guido LEMOS de SOUZA Filho**

Professor, Department of Computer Science  
Leader, Digital Video Advanced Application Lab (Lavid)  
Federal University of the Paraíba, Brazil  
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In addition to his above-mentioned affiliations, Guido Lemos de Souza Filho is a director of the Informatics Center the Federal University in Paraíba, Brazil. Dr. Lemos worked as one of the designers of Ginga Middleware, which was adopted as a standard by the ITU and is used in the Brazilian digital TV System and the DTV systems of 12 countries in Latin America and Africa.

At Lavid, he works on research in distributed multimedia systems, digital television, digital cinema and accessibility. He is also the research leader of the Project of Advanced Visualization at RNP, Brazil's National Education and Research Network.

He received a BS degree in computer science from the Federal University of Paraíba, Brazil, in 1988 and a M.Sc., in 1991. In 1997, he received a PhD degree in computer science from the Pontificia Universidade Católica do Rio de Janeiro. Professor Lemos is also a member of the Brazilian Computer Society and ACM.

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**Thomas Evan LEVY**

Distinguished Professor, Anthropology  
Norma Kershaw Chair in the Archaeology of Ancient Israel and Neighboring Lands  
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Thomas E. Levy is a fellow of the American Academy of Arts and Sciences, and a Levantine field archaeologist. His primary interest is in the role of technology, especially early mining and metallurgy, on social evolution from the beginnings of sedentism (living in one place for a long time) and the domestication of plants and animals in the Neolithic period to medieval Islamic times. Most of his fieldwork takes place in southern Jordan.

Levy directs the Center for Cyber-Archaeology and Sustainability at the Qualcomm Institute - California Institute of Telecommunications and Information Technology (Calit2), and Levantine Archaeology Laboratory on the main campus.

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**Mark LIDIKAY**

Chief Software Architect  
BitSpeed  
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For the last two years, Mark Lidikay has been responsible for the development and support of BitSpeed's data movement, security and internal/external infrastructure solutions.

For the previous 21 years, Lidikay served as chief engineer for Holden-Andrew Corporation, a computer/network systems integrator. He oversaw computer network design, development, support and compliance for various clients, including certified public accountants (CPAs), attorneys, manufacturers, network/software developers, and defense systems contractors.

Lidikay has spent his life pursuing his passion for electronics and computer/network design and troubleshooting. His career began in 1978 as a software developer for the Los Angeles Unified School District. As his knowledge of computer hardware, software, and digital communications deepened, he led the development and implementation of hundreds of network design projects, and consulted for dozens of firms, and their respective CTOs, IT leaders, and project managers. He now designs computer networks across the world, with a penchant for optimization and performance, often using wireless transmission (radio bands, WiFi, satellite, laser, etc.).

Lidikay's no-nonsense approach, combined with his experience in electronics, software, hardware, and networking technologies, has earned him a reputation for successfully identifying the true nature of any type of networking problem—from any layer—no matter how complex. His ability to understand the interplay of a myriad of technologies makes him very qualified to advise and validate novel network designs—from needs analysis to technical design, from proof-of-concept to wide-scale implementation and optimization.

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**Milos Liska**

Researcher  
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Milos Liska is currently a researcher with Czech NREN CESNET. He has earned his PhD. in informatics from the Masaryk University in 2010. He is interested especially in high-quality, low-latency multimedia transmissions over high-speed networks and its applications in various fields including medicine, arts, broadcasting and cinematography, sports or education including aspects such as user-empowered orchestration of large-scaled, distributed transmissions or automated user-empowered control of dynamic network infrastructures. He is also working on projects concerning videoconferencing, webconferencing, tools for collaborative environments and collaborative workflows.  
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**Andy MALTZ**

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The Academy reconstituted its Science and Technology Council in 2003, and as its first managing director, Maltz is responsible for developing and implementing its operational plan. He also administers the Council's day-to-day operations for individual contributions to selected Council initiatives, and for representing the Academy on science and technology issues at industry, government and academic forums. Maltz co-authored *The Digital Dilemma* and *The Digital Dilemma 2*, the Academy's landmark reports on long-term preservation of digital motion pictures, and is the project director for the Academy Color Encoding System (ACES), an industry-developed platform for color management, digital image interchange, and long-term archiving.

Previous to the Academy, Maltz was CEO of Avica Technology Corp., where he led the first worldwide commercial deployment of digital cinema servers, drove the development of key technologies for digital cinema, and was heavily involved with the digital releases of many major motion pictures in the U.S., Europe, and Asia. Previous to Avica, Maltz served as a consultant to companies such as Sharp Electronics and Microsoft, where he spearheaded the development of the Advanced Authoring Format. Prior to these assignments, he was executive vice president of operations and engineering for nonlinear editing pioneer Ediflex Digital Systems.

Maltz served on the U.S. National Archives Public Advisory Committee for Electronic Records Archives for eight years, is an associate member of the American Society of Cinematographers, and is a Fellow of the Society of Motion Picture and Television Engineers (SMPTE), where he serves on several engineering committees and the SMPTE Journal Board of Editors.

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**Lee MANOVICH**

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Dr. Lev Manovich is the author and editor of eight books including *Data Drift* (RIXC, 2015); *Software Takes Command* (Bloomsbury Academic, 2013); *Soft Cinema: Navigating the Database* (The MIT Press, 2005); and *The Language of New Media* (The MIT Press, 2001), which was described as "the most suggestive and broad ranging media history since Marshall McLuhan."

Manovich is a professor of computer science at The Graduate Center, City University of New York, and a director of the Software Studies Initiative, which works on the analysis and visualization of big cultural data. In 2013, he appeared on the list of New York-based *Complex* magazine/media platform's "25 People Shaping

the Future of Design.” He was also included in the 2014 list of Vox Media/The Verge’s “50 Most Interesting People Building the Future.”

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**Todd MARGOLIS**

Senior Solution Architect, Partner Engineering Group  
Qlik  
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Todd Margolis is a transmedia producer of immersive platforms. He is currently a senior solution architect in the partner’s engineering group at Qlik, where Margolis develops visualizations for business intelligence systems. His current research investigates human computer interaction with emerging media, drawing on 15 years of experience creating tele-collaborative immersive and interactive artworks and systems.

He has published numerous papers on mixed reality art and interaction, and lectures on new media both nationally and internationally. Margolis’s work has been shown in museums, festivals and galleries around the world.

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**Ron MARTIN**

Vice President and Director Of New Technologies  
Panasonic Hollywood Lab  
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Martin is director of the Panasonic Hollywood Lab, a division of Panasonic Research and Development of North America. He has more than 35 years of experience in entertainment technologies in the field of image processing for film and television.

Prior to his position with Panasonic, Martin served as vice president of engineering and operations at Universal Studios Hollywood, and then as vice president of new technology development at Deluxe Digital Studios.

He was instrumental in the development and deployment of such technologies as digital film mastering, DVD, Blu-ray, digital cinema, and 3D and is now charged with the deployment of the next generation Blu-ray Disc format that embraces UHD/4K imaging with High Dynamic Range (HDR) video. Martin currently lives at the base of the Rocky Mountains in southwest Colorado.

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**Inder MONGA**

Chief Technology Officer and Area Lead of network engineering, tools and research,  
Energy Sciences Network (ESnet) *and*  
Division Deputy, Lawrence Berkeley National Laboratory, U.S. Department of Energy  
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Indermohan (Inder) S. Monga serves as the division deputy of technology for the scientific networking division at Lawrence Berkeley National Lab and CTO of Energy Sciences Network (ESnet). Monga plays a key role in developing and deploying advanced networking services for collaborative and distributed “big-data” science, and leads software and tools development at ESnet. Recently, his focus has been on the broad adoption of SDN in the wide-area network including recent work on operationalizing SDN, multi-layer SDN and software-defined exchanges.

He actively contributes to Open Networking Foundation (ONF), the standards organization for SDN, as chair of the ONF Research Associates and member of Open-Source Software Leadership Council. He currently holds 17 patents and has over 20 years of industry and research experience in telecommunications and data networking.

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**Steve MORRIS**

Director of Engineering, Skywalker Sound  
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Steve Morris is a 20-year veteran in the audio engineering industry and has worked on designing facilities in every facet of the media business, including music, film and video post-production as well as television broadcast. He attended New York University.

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**Bruno MUNGER**

Director of Business Development  
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Bruno Munger has 25 years of experience in the production and post-production industries. He specializes in workflow design for file-based 2D/3D image capture, file-based delivery, VFX and Digital Intermediate color grading.

Munger is currently director of business development at Colorfront. Before this company, Munger was involved in product management, product design, business development and customer training for industry-leading companies including Digital Vision, Autodesk, MTI Films and Snell & Wilcox.

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**Naohisa OHTA**

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Naohisa Ohta, PhD, is currently in charge of the digital media innovation field at the Graduate School of Media Design at Keio University in Japan. There, he also directs research projects focused on new applications and technological platforms for creating collaborative visual content via high-speed networks. He is also interested in research on literacy-free media systems for sharing emotions between human and non-human animals with high-quality digital media via networks, including 4K and "Beyond 4K" applications.

Dr. Ohta formerly worked at NTT Laboratories, where he researched and developed signal-processing algorithms for audio/visual communication and highly parallel DSP systems and architectures. He was part of the R&D team that worked on Super-High-Definition (SHD)- imaging applications for futuristic optical fiber networks, and contributed to the basic development for one of the world's first 4K motion picture systems. After NTT, he worked at Sony, serving as the president of its Broadband Applications Laboratory, directing R&D on audio/visual transmission with QoS for real-time applications, scalable coding for high-quality digital cinema, extra-reality video creation technologies, and personalization technologies.

He is an IEEE Fellow and a SPIE Fellow. He received his BS, MS and PhD degrees from Tohoku University.

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**Peter OTTO**

Director, Calit2/UCSD Sonic Arts R&D  
Director, Music Technology, Department of Music  
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Peter Otto is an expert in the language and aesthetics of musical and media expression, and also accomplished in advanced hardware/software design and engineering, including instrumentation and facilities design, systems and networking applications, and a wide array of media technology research and development areas. Classically trained in musical performance and composition, he completed his graduate work at California Institute of the Arts in Los Angeles in 1984, and continued there on faculty for several years. He currently holds appointments at UCSD as technology director on the Faculty of Music, and as director of research and development in the Sonic Arts R&D group at UCSD's Calit2.

As an educator, he is a founding faculty member and advisor to UCSD Music's highly regarded Interdisciplinary Computing and the Arts Major (ICAM), a program that has produced top performers in the nation's most advanced digital media industries and leading universities. As a hardware designer, he invented the first digital audio workstation control surface (Waveframe's Contact MIDI Panel), designed the hardware-based spatial audio system TRAILS, and more recently designed audio systems for Calit2 (StarCave, HiperWall and other systems).

His audio and music facility credits include Calit2's Spatial Audio Lab (Spatlab) and collaborative designs for Calit2's Black Box and Digital Cinema Theatres, and new systems and studios at UCSD Music's Prebys Music Center (Experimental Theatre and other systems). Other design work includes advanced research projects in high-definition, multi-channel audio streaming and production systems, most notably for CineGrid.

Otto has written software for diverse applications in multi-channel and spatial audio, including binaural and multi-channel sound design environments and utilities, and a variety of spatial-audio imaging packages. An entrepreneur, he has founded two software companies and consulted for top tier firms in the private sector. His performance design work has been heard in major American, European and Asian venues such as Carnegie Hall, Juilliard, Los Angeles Philharmonic, SIGGRAPH, and numerous other international locales.

Otto is on leave from UCSD during the 2015-16 academic year, serving as chief of innovation at a new music startup called Boomcloud360.

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**Dana M. PLEPYS**

Director  
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Dana Plepys is the director and curator of the CineGrid Exchange, a multi-site, distributed digital media repository supporting CineGrid member-driven testbeds for research and experimentation in digital media asset management, distribution and preservation applications.

Plepys is also an associate director of the Electronic Visualization Laboratory (EVL), University of Illinois at Chicago, where she is responsible for administering EVL's advanced research, as well as managing its collaborations and technology transfer with industry and affiliated laboratories.

She assists in the development of tools, techniques, and systems for scientific and artistic VR and visualization applications, and the development and production of Web and video documentation of EVL research and activities. Plepys is also responsible for EVL's fiscal and business affairs.

Since 1993, Plepys has been editor of the SIGGRAPH Video Review (SVR), one of the world's most widely circulated and comprehensive video-based publications showcasing the latest concepts in computer graphics and interactive techniques. She has produced over 184 issues of the SVR, and is responsible for production, publication and media distribution. Plepys is actively involved in the initiative to preserve and digitize SVR's historical archives (1979-present).

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**Cliff PLUMER**

President  
Jaunt Studios  
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Cliff Plumer is responsible for the development of content and production at Jaunt, a virtual reality (VR) studio based in the Los Angeles region. Prior to joining the company, Plumer was an angel investor and advisor to Oculus Rift, a member of the board of directors of Telltale Games, and a producer of VR content for the launch of the Samsung GearVR.

While Plumer was the CEO of Digital Domain, the company won an Academy Award for visual effects on the movie, *The Curious Case of Benjamin Button* (2008), in addition to receiving Technical Achievement awards from the Academy for innovation. At Digital Domain, Plumer established a studio in Vancouver and a virtual production studio in Los Angeles.

As chief technology officer of Lucasfilm Ltd., he directed the construction of the technical infrastructure of the Letterman Digital Arts Center in San Francisco, and the Lucasfilm Studio in Singapore. Plumer worked closely with George Lucas on the development of the first digital cinema production for the *Star Wars* trilogy. Beginning his career at NBC, he has since worked on more than 100 Hollywood feature films and television series.

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**Luc RENAMBOT**

Research Associate Professor  
Department of Computer Science and Electronic Visualization Laboratory (EVL)  
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Dr. Renambot received a PhD at the University of Rennes in France, conducting research on parallel rendering algorithms for illumination simulation. Afterwards, he held a post-doctoral position at the Free

University of Amsterdam, where he worked on bringing education and scientific visualization to virtual-reality environments.

Since 2003, he has been in Chicago at UIC/EVL, first as a post-doc and now as a research associate professor, in computer science, where his research topics include high-resolution displays, computer graphics, parallel computing, and high-speed networking.

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**Jürgen P. SCHULZE**

Research Scientist, Qualcomm Institute  
Adjunct Professor, Department of Computer Science and Engineering  
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Dr. Schulze's research interests include scientific visualization in virtual environments, human-computer interaction, real-time volume rendering, and graphics applications on mobile devices.

He holds an MS from the University of Massachusetts and a PhD from the University of Stuttgart, Germany.

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**Jason SHERWOOD**

Senior Manager, Global Systems Architecture  
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Sherwood is a lead in networking and cloud systems at Equinix, heading up a team of solutions architects. Equinix is a company that "connects the world's leading businesses to their customers, employees and partners inside the most interconnected data centers in 33 markets across five continents."

Sherwood has 23 years experience in the industry, having led teams at BT and Verizon before joining Equinix.

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**Daisuke SHIRAI**

Senior Research Engineer  
NTT Network Innovation Laboratories  
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Dr. Shirai is currently a senior research engineer at NTT Network Innovation Laboratories, where he researches super-high-definition imaging systems and their transmission technology.

Dr. Shirai has applied his expertise across multiple domains through his study of practical applications in digital audio and video broadcasting technology, image coding, information theory, networking, human-computer interaction, software architecture. He pioneered the world's first 4K JPEG 2000 codec system, which enables low latency 4K60p video transmission on a Gigabit network. He is a veteran in the design and implementation of parallel processing architecture, hardware codec boards, codec control software and high-performance forward error correction (FEC) technology. He also developed FireFort, a high-performance FEC technology, which is a part of the FEC standard in MMT (MPEG Media Transport).

Dr. Shirai is currently leading design and implementation in the research field of Network Supported Collaborative Work (NSCW), which centers on the unification of high-quality robust media transmission technologies, multimodal interaction design and emerging web-based technologies.

Dr. Shirai received his PhD in media design, MEng in computer science, and BEng in electronic engineering from Keio University, Japan, in 2014, 2001, and 1999 respectively.

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**Steven A. SILVA**

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Steven A. Silva is the VP of technology and strategy at 21st Century Fox. He bridges the longer term focus of the advanced technologies groups and the shorter term needs of the 21st Century Fox Networks' Engineering and Operations (NE&O) team. Silva works in conjunction with Fox executives to develop strategy for

integration of emerging technologies with the NE&O strategic plan and capital project plans, including timing of their assimilation and integration within Fox's NE&O.

In 2006, Silva formed Fox Networks NE&O's procedures and training department, and worked in the development and testing of new broadcast technologies in the Fox DTV lab.

Prior to Fox, Silva was a freelance video engineer/operator and editor for TV shows and films. He began his entertainment career at Paramount Pictures as an engineer-in-charge on many of the lot TV productions. He designed Paramount's first combo production edit bays, which were used on various stages. Silva's career began in the satellite/missile industry as an electro/mechanical analyst and he advanced to program/project management.

He is a graduate of the University of Southern California and is a member of AES, ATSC, SMPTE, SBE, and IEEE.

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**Larry SMARR**

Director, California Institute for Telecommunications and Information Technology (Calit2)  
Harry E. Gruber Professor of Computer Science and Information Technologies, (CSE)  
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Larry Smarr is the founding director of the California Institute for Telecommunications and Information Technology (Calit2), a UC San Diego/UC Irvine partnership, and holds the Harry E. Gruber professorship in CSE at UC San Diego's Jacobs School of Engineering. Before that he was the founding director of the National Center for Supercomputing Applications (NCSA) at the University of Illinois at Champaign-Urbana.

He is a member of the National Academy of Engineering, as well as a Fellow of the American Physical Society and the American Academy of Arts and Sciences. In 2006 he received the IEEE Computer Society Tsutomu Kanai Award for his life-time achievements in distributed computing systems. In 2014 he received the Golden Goose Award recognizing how his federally funded research has had significant human and economic benefits.

Dr. Smarr is a member of the DOE ESnet Policy Board. He served on the NASA Advisory Council to four NASA Administrators, was chair of the NSF Advisory Committee on Cyber-infrastructure for the last three years, and for eight years, he was a member of the NIH Advisory Committee to the NIH Director, serving three directors. He was principal investigator of the NSF OptIPuter project and of the Moore Foundation CAMERA global microbial metagenomics computational repository. His personal interests include growing orchids, snorkeling coral reefs, and quantifying the state of his body. You can follow him on his life-streaming portal at <http://ls marr.calit2.net/>.

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**Roger SMITH**

Director, Digital Library Development Program  
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Roger Smith has led the Digital Library Development Program (DLDP) for the past five years at the UC San Diego Library. The DLDP coordinates a number of stakeholders with technical and subject expertise in the development of digital collections. The Library offers an environment to create, manage, preserve and make available content through our Digital Asset Management System (DAMS) based on the Hydra / Blacklight platform. The Library's collections contain a wide range of format types, including still image, text, moving image, audio and research data sets. Prior to his role with the DLDP, Smith worked with preservation and content management for the UCSD Library and previously at the University Libraries of Rutgers, the State University of New Jersey.

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**Laurence J. THORPE**

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Larry Thorpe joined Canon U.S.A. in Feb 2004. He is now senior fellow, professional engineering and solutions within the Imaging Technologies & Communications Group of Canon USA Inc.

In 1982, Thorpe joined the Sony Broadcast Company and from 1984 to 2003, was responsible for HDTV market development. From 2001 to 2004, he was senior vice president of content creation systems.

Thorpe worked for RCA's Broadcast Division from 1966 to 1982, where he developed a range of color television cameras and telecine products. In 1981, Mr. Thorpe won the David Sarnoff Award for his innovations in automatic studio color cameras. He holds ten patents based upon his work at RCA.

From 1961 to 1966, Mr. Thorpe worked in the designs department of the BBC in London, England.

In January 2015, he was awarded the 2014 Engineering Emmy Charles F. Jenkins Award for lifetime achievement by the Academy of Television Arts and Sciences. He received the NAB 2000 Television Engineering Achievement Award and the Montreux 2000 Gold Medal Award for digital cinematography. Mr. Thorpe is an IEE Graduate of the College of Technology in Dublin, Ireland and received his Chartered Engineer (C. Eng.) and MIEE distinction in 1965.

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**Natalie VAN OSDOL**

Vice President

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Van Osdol is vice president of Pacific Interface, an international consulting company that provides a wide range of specialized services to organize and manage research collaborations, technical symposia, technology showcases, and media events, in addition to strategic consulting and business development services. She is also one of the co-founders of CineGrid and serves as co-executive director.

For over 20 years, Van Osdol has organized and directed international events and conferences produced by Pacific Interface, including technical workshops, digital cinema symposia, technology demonstrations, international trade show exhibitions, press events and two museum exhibitions of computer graphics art in Japan. She produced the first U.S. and European demonstrations of 4K digital cinema, and was associate producer of the *Visualization: State of the Art* series of video reports published by ACM/SIGGRAPH. In collaboration with NTT Corporation and the Whitney Museum of American Art, Van Osdol was the producer of *The American Century: A Director's Preview*, the first multimedia showcase of fine art using super-high-definition (SHD) imaging technology.

Van Osdol was also a founding partner of Compression Technologies, Inc., a company dedicated to the development and licensing of digital video compression tools. She attended Sophia University in Tokyo, Japan, and UCLA.

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**Rick WAGNER**

High-performance Computing Systems Manager, San Diego Supercomputer Center

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Rick Wagner focuses his research on analyzing simulations of supersonic turbulence. In his managerial role, Wagner has technical and operational responsibility for two of the NSF-funded Extreme Science and Engineering Discovery Environment (XSEDE) HPC clusters, Trestles and Gordon, and SDSC's Data Oasis parallel file systems.

Wagner has worked with Argonne National Laboratory on coupling remote large-scale visualization resources to tiled display walls over dynamic circuits networks on the Department of Energy's Energy Sciences Network. His other interests include promoting the sharing of astrophysical simulations through standardized metadata descriptions and access protocols.

He is currently serving as the vice-chair of the Theory Interest Group of the International Virtual Astronomical Observatory. His latest side project involves working with undergraduates to develop course materials on parallel programming for middle and high school students using Raspberry Pi credit card-sized computers that encourage digital exploration.



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**Erik WEAVER**

Project Manager, Production in the Cloud Project lead  
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Erik Weaver is a specialist focused on the intersection of “the cloud,” media and the entertainment industry. His current “Production in the Cloud” project unites senior leaders from the six major film studios in developing next-generation cloud standards, support Hollywood organizations and major cloud vendors, and produce proof of concepts. The group encompasses many aspects of the cloud, including transport, security, metadata, long-term storage, and formation of an agnostic framework that unites key vendors and studios.

Previously, Weaver was CEO of Digital Ribbon, Inc., a very early pioneer in the field of cloud-based computing.

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**Richard WEINBERG**

Research Associate Professor, Charles S. Swartz Endowed Chair in Entertainment Technology  
USC School of Cinematic Arts  
[weinberg@usc.edu](mailto:weinberg@usc.edu)

Richard Weinberg is a research associate professor at the USC School of Cinematic Arts and holds the Charles S. Swartz Endowed Chair in Entertainment Technology.

He is a regular contributor to CineGrid, with 4K movies ranging from *24 Flowers per Second* and *MicrOrganisms* to *When Crystals Collide*. His short subjects depict the macro- and microscopic worlds that the eye alone cannot see. He has pioneered digital cinema microscopy, shooting ultrahigh resolution movies of microscopic subjects, and creating 4K movies that have been streamed live to San Diego, Tokyo, Amsterdam and Prague. His microscopy was projected onto the facade of the new Exploratorium museum in San Francisco for its 2013 grand opening celebration.

His years at USC have included visualizing the brain for neurosurgery, connecting the school to global high-speed research networks, producing the computer animation for five 70mm IMAX films and leading a Tokyo-based student internship program for USC students.

He is currently working on an NSF funded “tele-microscopy for teaching biology” project, connecting USC with a distant STEM high school in Chattanooga, Tennessee.

He received a BS in computer science and psychology from Cornell University, and a MS and PhD in computer and information science from the University of Minnesota. Dr. Weinberg received the Computer Science and Engineering Distinguished Alumnus Award from U. of Minnesota in 2003.

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**Carol Naslund WILLING**

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Carol Willing is a director of the Python Software Foundation, which promotes, protects and advances the Python programming language. She also co-organizes PyLadies San Diego and San Diego Python.

Willing additionally works as the Geek-In-Residence at Fab Lab San Diego, a non-profit community space that provides access to the tools and training for the production of objects and electronics; it is part of a large network of such Labs in more than 30 countries. Fab Labs “explore the relationship between the digital and physical world...as a network of people who investigate the popularization of new modes of production and invention...”

Willing is an active contributor to Project Jupyter, which was born out of the IPython Project in 2014 as it “evolved to support interactive data science and scientific computing across all programming languages.” She is also a maintainer for OpenHatch—an “open source involvement engine”—and the Anita Borg Institute for Women and Technology’s open source projects.

Combining a love of nature, the arts, and math with a BS in electrical engineering from Duke University and a M.S. in management from MIT, Willing has enjoyed creating and teaching for over 20 years. Willing recently spoke at the Grace Hopper Celebration of Women in Computing 2015, PyCon 2015, and Write/Speak/Code 2015.