# ⊕ TAGA

TECHNICAL ASSOCIATION OF THE GRAPHIC ARTS

## Michael H. Bruno

# T A G A   A W A R D

# 2012

2012

TECHNICAL
ASSOCIATION
OF THE
GRAPHIC ARTS

Michael
H.
Bruno
Award

James
C.
King

⊕ TAGA

**Presented at the 64th
Annual Technical Conference of the
Technical Association of the Graphic Arts**

**Jacksonville, FL USA**

**March 20, 2012**

# Michael H. Bruno Taga Award For Outstanding Contributions to the Graphic Arts Industry

The Technical Association of the Graphic Arts is an international organization of technologists, scientists, technical and production personnel in the printing and allied industries, and students in accredited graphic arts programs. It was established in 1948 as a forum for reporting on new research and technology in the graphic arts. It has a long history of distinguished annual conferences at which technical papers on graphic arts subjects are presented. The annual volumes of TAGA Proceedings are the published records of these papers by leading technical and scientific men and women who have contributed measurably to the progress of printing technology and graphic science throughout the world. The Board of Directors of TAGA hereby recognize professionals with distinguished careers to receive the 2012 TAGA Michael H. Bruno Award in appreciation of their dedicated services and contributions to the advancement of graphic arts internationally.

As evidence of this honor, the awardees will receive the Michael H. Bruno Award. This award is named for the late Michael H. Bruno. Printing was his vocation for his entire working life. He was a kind and gentle man who was passionate about printing and the people who produced it. In his own words, "I had the good fortune to be where the action was during the most active period since printing was invented." We, in turn, were very fortunate to know Mike. Everyone who knew him or knew of him respected him and his incredible knowledge of the industry. What a wonderful legacy to leave for the world.

Presented here is a summary of the accomplishments of this year's distinguished recipients of the Michael H. Bruno Award.

# Michael H. Bruno Award 2012 to James C. King

As a young math student at Washington State University (WSU), Jim King wrote his first computer program in 1959. He went on to become one of the first people to obtain a Ph.D. with the field of study officially denoted "Computer Science." That was from Carnegie Mellon University (CMU) in 1969 and his thesis, under Professor Robert Floyd, was about formally proving the correctness of computer programs. This was one of the earliest theses on this subject and it became a highly referenced work.

After receiving his Ph.D. Dr. King joined the IBM T. J. Watson Research Center in Yorktown Heights, New York. At the Watson Research center he did seminal work on "symbolic program execution" and continued his contributions to the field of proving the correctness of computer programs. In 1978 Dr. King transferred to the IBM Almaden Research Center in San Jose, California where he organized the Almaden I/O Systems Laboratory, focused on printer controllers, font development and page description languages.

In 1988 Dr. King moved from IBM Research to Adobe Systems Incorporated in order to form the Adobe Advanced Technology Group (now called the Advanced Technology Labs), which he built and managed for the next 8 years. Adobe was a small but quickly growing 6-year-old company when King joined. Adobe was beginning to play a significant role in the printing and publishing industry so King began a crash program to learn about that industry.

Dr. King became expert in PostScript, Adobe's primary product at that time, and provided leadership in the major revision of PostScript called PostScript Level 2. This second version of PostScript addressed many of the shortcomings that were

discovered through early use of the language and supporting software. Level 2 added: managed color, image compression/decompression, forms, patterns, binary encoding, composite font support for Asian languages, unification with Display PostScript, advanced half-toning, and many other features in common use today. PostScript Level 2 was the first major application to support JPEG just as it was approved as an international standard. Coming out of the pioneering work on color that was done for PostScript Level 2, King was active in the formation of the International Color Consortium.

Dr. King has become recognized as an expert on PostScript, PDF, digital signatures, color and color management, PDF forms including XFA, XML and file packaging technologies, and he just completed a term as the manager of standards activities for Adobe. Starting in January 2007, as Adobe's PDF architect, King led a team of computer scientists instrumental in the technical aspects of turning the management of the PDF specification over to the International Standards Organization (ISO). This was published as ISO 32000-1 in July 2008. King continued as the ISO 32000 Project Leader working on a revision of this standard: ISO 32000-2 until mid 2010.

Jim King has been a member of the Association for Computing Machinery (ACM) since 1963 and a member of the IEEE Computer Society since 1989. Dr. King also joined the Imaging Science and Technology professional society in 1990 and eventually served as its President 2005 – 2006.

Dr. King was one of the founders of the ACM/IEEE Software Engineering Conferences, the IS&T & SID Color Imaging Conference and the IS&T Archiving Conference. He was also a member of the Cal Poly Computer Science Department Industrial Affiliates 2000-2006 and a member of the Cal Poly Graphics Communications Department Industrial Affiliates 2006-2010. Dr. King gave a presentation on color management at the 1999 Taga Conference.

Throughout his career he has been known for presenting cogent explanations of the technology upon which Adobe's products are based at conferences and in customer briefings. He has published numerous technical papers and authored numerous patents.

## Michael H. Bruno
### TAGA AWARD

## Previous Honorees

**2012**
James C. King
John E. Warnock

**2011**
Richard Goodman

**2010**
Bernard Pineaux

**2009**
Patrice J. Mangin

**2008**
Tim C. Claypole

**2007**
Bruce Blom

**2006**
Robert Chung

**2005**
Helene Juhola

**2004**
Harvey Levenson

**2003**
Nils Enlund

**2002**
Takashi Numakura

**2001**
Ing Helmut Kipphan
Irving Pobboravsky
William Ray

**2000**
Mitsuo Kaji

**1999**
Joel Rubin
Walter Zawacki

**1998**
Jacqueline Fetsko
Franz Sigg

**1997**
Edward Granger
Raymond Prince

**1996**
Gary Field
David McDowell

**1995 – Orlando**
Eiichi Inoue
Patrice Dunn

**1995 – Paris**
Anthony Johnson

**1994**
Kurt Schlapfer

**1993**
Paul Borth
Ing Uwe Gast

**1992**
Richard Fisch
Milton Pearson

**1991**
Sven Ahrenkilde
Brian Chapman
Charles Rinehart

**1990**
Robert Downie
Thomas Fadner
Tapio Lehtonen

**1989**
H. Brent Archer
S. Thomas Dunn

**1988**
James Cox
Philip Evanoff
Lawrence Wilson

**1987**
Werner Gerlach
Warren Rhodes
Kenneth West

**1986**
John MacPhee
J. Tom Morgan, Jr.
Miles Southworth

**1985**
Jean Chevalier
Emilio Gerboni
Simo Karttunen
Bryan Sunderland

**1984**
Robert Bassemir
Kurt Pfahl

**1983**
William Schreiber
William Somerville

**1982**
Gordon Johnson
Herbert Phillips

**1981**
John Crosfield
George Jorgensen

**1980**
William Schaeffer
Philip Tobias

**1979**
Harvey George
Richard Maurer
John McMaster

**1978**
Bernard Halpern
Francis Wurzberg, Jr.

**1977**
Albert Materazzi
Robert Rossell
Earl Sundeen
William Walker

**1976**
Michael Bruno
Paul Hartsuch
Frank Preucil
John Yule

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