

**CURRICULUM VITAE
PROFESSOR ALAN CONRAD BOVIK**



Biographical Sketch

Al Bovik was born in Kirkwood, MO on June 25, 1958. He received the B.S. degree in Computer Engineering in 1980 and the M.S. and Ph.D. degrees in Electrical and Computer Engineering in 1982 and 1984, all from the University of Illinois, Urbana-Champaign.

He holds the Ernest J. Cockrell Endowed Chair in Engineering at The University of Texas at Austin, where he is a Professor in the Department of Electrical and Computer Engineering and The Institute for Neurosciences, and Director of the Laboratory for Image and Video Engineering (LIVE). During the Spring of 1992, he held a visiting position in the Division of Applied Sciences, Harvard University, Cambridge, Massachusetts.

He is well known as the inventor or co-inventor of Order Statistic Filters; the Gabor Texture Model; the Image Modulation Model; the Structural Similarity (SSIM) and Visual Information Fidelity (VIF) Indices for image quality assessment, the MOtion-based Video Integrity Evaluation (MOVIE) index for video quality assessment, the BRISQUE, BLIINDS and NIQE blind image and video quality models, the LIVE Image and Video Quality Databases (downloaded thousands of times), and SIVA - the Signal, Image and Video Audiovisual Demonstration Gallery (used by more than 1000 sites around the world), as well as many other contributions to the fields of digital television, image and video processing, computational vision, and modeling of visual perception.

Professor Bovik has frequently been featured or quoted in the media including *The Wall Street Journal*, *The Hollywood Reporter*, *RPS Journal*, *Austin American-Statesman*, *Emmy Magazine*, and *Sound and Picture*. He has published more than 800 technical articles and U.S. patents in these areas. His publications have been cited more than 85,000 times in the literature, his current H-index is above 100, and he is listed as a **Highly-Cited Researcher** by the Web of Science Group, indicating one of the top 1% of most-cited researchers within the field of Engineering. He is the author of the widely-adopted *The Handbook of Image and Video Processing*, Second Edition (Elsevier Academic Press, 2005), *Modern Image Quality Assessment* (Morgan & Claypool, 2006), and *The Essential*

Guides to Image and Video Processing (Elsevier Academic Press, 2009).

Dr. Bovik received Television's highest honor, an individual **Primetime Emmy Award for Outstanding Achievement in Engineering Development** from the Academy of Television Arts and Sciences (The Television Academy) in October 2015, for his work on the development of video quality prediction models that have become standard tools in broadcast and post-production houses throughout the television industry. He will receive the **Progress Medal** from The Royal Photographic Society in November 2019, which is awarded in recognition of any invention, research, publication or other contribution which has resulted in an important advance in the scientific or technological development of photography or imaging in the widest sense. This award has been given continuously since 1878. He received the **2019 IEEE Fourier Award** "For seminal contributions and high-impact innovations to the theory and application of perception-based image and video processing." He was also the recipient of the **2017 Edwin H. Land Medal** from The Optical Society and the Society for Imaging Science and Technology, "For substantially shaping the direction and advancement of modern perceptual picture quality theory, and for energetically engaging industry to transform his ideas into global practice."

He has also received all of the major awards from the IEEE Signal Processing Society, including: the **Norbert Wiener Society Award** (2013); the **Claude Shannon/Harry Nyquist Technical Achievement Award** (2005); the **Best Paper Award** (2009); the **Signal Processing Magazine Best Paper Award** (2013); the **Karl Friedrich Gauss Education Award** (2007); the **Distinguished Lecturer Award** (2000); the **Leo L. Beranek Meritorious Service Award** (1998); the **ICIP Pioneer Award** (2019); the **Sustained Impact Paper Award** (2017); the **Signal Processing Letters Best Paper Award** (2017); and (co-author) the **Young Author Best Paper Award** (2013).

He is the author of two **2017 Google Scholar Classic Papers** recognizing highly-cited papers that have stood the test of time, and are among the ten most-cited articles in their area of research published ten years earlier. He also received the **EURASIP Best Paper Award** (2018), the **Picture Coding Symposium Best Paper Award** (2018), and the **IEEE Circuits and Systems for Video Technology Best Paper Award** (2016). He also was named recipient of the **Honorary Member Award** of the Society for Imaging Science and Technology for 2013, received the **SPIE Technology Achievement Award** for 2012, and was the **IS&T/SPIE Imaging Scientist of the Year** for 2011.

He is also a recipient of the **Joe J. King Professional Engineering Achievement Award** (2015) and the **Hocott Award for Distinguished Engineering Research** (2008), both from the Cockrell School of Engineering at The University of Texas at Austin, the **Distinguished Alumni Award** from the University of Illinois at Champaign-Urbana (2008), the **IEEE Third Millennium Medal** (2000) and two journal paper awards from the Pattern Recognition Society.

He is a Fellow of the IEEE, a Fellow of the Optical Society of America (OSA), a Fellow of the Society of Photo-Optical and Instrumentation Engineers (SPIE), and is a member of the Society of Motion Picture and Television Engineers (SMPTE) and a member of both The Television Academy (ATAS) and the National Academy of Television Arts and Sciences (NATAS). He is also a member of the Royal Society of Photography.

Professor Bovik has been involved in numerous professional society activities, including: Board of Governors, IEEE Signal Processing Society, 1996-1998; Editor-in-Chief, *IEEE Transactions on Image Processing*, 1996-2002; Editorial Board, *The Proceedings of the IEEE*, 1998-2004; Senior Editorial Board, *IEEE Journal on Special Topics in Signal Processing*, 2005-2009; and Founding General Chair, *First IEEE International Conference on Image Processing*, held in Austin, Texas, in November, 1994. Dr. Bovik is also a busy and much sought-after consultant to industry.

Honors and Awards



1. Elected to Honor Society of Phi Kappa Phi, 1981.
2. Stark Centennial Endowed Fellow in Engineering, University of Texas, Austin, 1987-1991.
3. Listed in *Men of Achievement*, 1988.
4. Honorable Mention, Thirteenth Annual Pattern Recognition Society Award for the paper "Nonparametric tests for edge detection in noise," *Pattern Recognition* (1988).
5. Registered Professional Engineer in the State of Texas (License # 114706).
6. Elevated to Senior Member of the IEEE, November 1989.
7. Supervised PhD Dissertation "On Using Chromatic Information in Stereo Correspondence" (John R. Jordan III), selected winner of the University of Texas all-campus Outstanding Dissertation Award, 1990.
8. Supervised winner of 1990 MCC Awards for Excellence in Computer Science and Electrical & Computer Engineering student paper award winner for the paper (Dapang Chen and A.C. Bovik) "Visual Pattern Image Coding," *IEEE Transactions on Communications*, vol. COM-38, no. 12, December 1990.
9. National Finalist, 1990 Eta Kappa Nu Outstanding Young Electrical Engineer Award. There were 7 Finalists in this U.S. competition.
10. William H. Hartwig Endowed Fellow in Engineering, The University of Texas at Austin, 1991-present.
11. Recipient of University of Texas **Engineering Foundation Faculty Excellence Award**, 1991.
12. Associate Director, Center for Vision and Image Sciences, The University of Texas at Austin, 1994-2000.
13. Honorable Mention, Nineteenth Annual Pattern Recognition Society Award for the paper "Using Chromatic Information in Dense Stereo Correspondence," *Pattern Recognition*, 1993.
14. Elected **Fellow of the Institute of Electrical and Electronics Engineers (IEEE)** "For Contributions to Nonlinear Image Processing," December 1995.
15. General Dynamics Endowed Fellow in Engineering, The University of Texas at Austin, 1996-2000.
16. Recipient of the IEEE Signal Processing Society **1998 Leo L. Beranek Meritorious Service Award Meritorious Service Award** in 1998. This is the highest service honor given by the Society. Citation: "For Broad and Extensive Service Contributions to the Society, and in Particular for the Creation of the IEEE International Conference on Image Processing."
17. Recipient of the **IEEE Third Millennium Medal**, 2000.
18. Recipient of the **IEEE Signal Processing Distinguished Lecturer Award** in 2000.
19. **Plenary Speaker**, *International Conference on Multimedia Processing and Systems*, Madras, India, August 14, 2000.
20. Named Robert Parker, Sr. Centennial Professor in Engineering, The University of Texas at Austin, September 2000-August 2003.
21. Named a Dean's Fellow in the College of Engineering in the Year 2002.
22. Named The Cullen Trust for Higher Education Endowed Professor, The University of Texas at Austin, September 2003-August 2005.
23. **Plenary Address**, *IEEE Southwest Symposium on Image Analysis and Interpretation*, Lake Tahoe, Nevada, March 28-30, 2004.
24. **Plenary Address**, *National Instruments NI Week*, Austin, Texas, June 2004.
25. Named the **Keys and Joan Curry/Cullen Trust Endowed Chair in Engineering**, The University of Texas at Austin, September 2005-2014.

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.