



Alexandros Eleftheriadis

Title: Associate Professor

Sector: Telecommunications and Signal Processing

Phone: +30 210 727-5210

Fax: +30 211 268-6853

Email: eleft@di.uoa.gr **Web page:** <http://www.di.uoa.gr/~eleft>

Academic Qualifications:

- Ph.D. in Electrical Engineering (1995), Columbia University
- M.Phil. in Electrical Engineering (1994), Columbia University
- M.Sc. in Electrical Engineering (1992), Columbia University
- Diploma, Electrical Engineering and Computer Science, National Technical University of Athens, Greece

Academic Appointments:

- Feb. 2008 – Present: Associate Professor, Dept. of Informatics and Telecommunications, University of Athens
- Jan. 2007 – Dec. 2009: Marie Curie Chair, Dept. of Informatics and Telecommunications, University of Athens
- Jul. 1995 – Jun. 2007 – Associate Professor (tenured), Dept. of Electrical Engineering, Columbia University

Teaching Activities: (current)

Undergraduate courses

- Signals and Systems
- Music Informatics

Postgraduate courses

- Advanced Topics in Signal Processing (state space methods)
- Data Compression (video compression)

Supervisor of 1 Ph.D. dissertation

Research Interests/Activities: (last 10 years)

- Digital video compression and communication
- Packet-based video communication systems
- Multimedia software and tools
- Music signal processing

Scientific Publications/Citations:

- 33 publications in refereed journals
- 63 refereed conference publications
- 68 contributions in international standardization efforts (MPEG-4, H.264, etc.)
- More than 2200 citations, h-index 29
- Co-editor of 1 book, co-author of 9 book chapters
- 16 issued US patents (more internationally), 17 patents pending. Patents used in Blu-ray DVD and ATSC (terrestrial digital TV in the US) systems (included in pools)

Top five publications

- D. Hong and A. Eleftheriadis, "XFlavor: Providing XML Features in Media Representation," *Journal on Multimedia Tools and Applications*, Vol. 39, No. 1, August 2008.

- A. Eleftheriadis and P. Batra, "Dynamic Rate Shaping of Compressed Digital Video," *IEEE Trans. on Multimedia*, Vol. 8, Nr. 2, April 2006, pp. 297-314.
- Y.-K. Wang, M. Hannuksela, S. Pateux, A. Eleftheriadis, and S. Wenger, "System and Transport Interface of SVC," *IEEE Trans. on Circuits and Systems for Video Technology*, Special Issue on Scalable Video Coding, Vol. 17, Nr. 9, September 2007, pp. 1149-1163 (invited paper).
- J.-B. Lee and A. Eleftheriadis, "Spatio-Temporal Model-Assisted Very Low Bit Rate Coding with Compatibility," *IEEE Trans. on Circuits and Systems for Video Technology*, *IEEE Trans. On Circuits and Systems for Video Technology*, Vol. 15, Nr. 12, December 2005, pp. 1517-1532.
- S.-F. Chang, A. Eleftheriadis, and R. McClintock, "Next-Generation Content Representation, Creation and Searching for New Media Applications in Education," *IEEE Proceedings*, Special Issue on Multimedia Signal Processing and Technology, Vol. 86, No. 5, May 1998, pp. 884-904 (invited paper).

Awards (Selected):

- Marie Curie Chair, 2007-2009, European Commission
- Winner (w. D. Hong), ACM Multimedia Open Source Software Competition, 2004
- NSF Faculty Early Career Development Award, 1997-2001.
- E. I. Jury Award, Dept. of Electrical Engineering, Columbia University, 1995.
- Paul V. Nichoplas Scholarship
- Graduate Research Assistantship, Dept. of Electrical Engineering, Columbia University, 1990-1995.

Selected Recent Activities:

- Co-founder and Chief Scientist, Vidyo, Inc., USA, 2005 (venture-backed start-up in video communications)
- Chief Editor, UCIF, H.264 SVC Profiles Group, since 2010.
- Board of Directors, International Multimedia Telecommunications Consortium (IMTC), 2010-2012.
- Co-editor, RTP Payload Format for SVC, RFC 6190, 2008-2011.
- Co-editor, ITU-T H.264.1, SVC Conformance Specification, 2007-2009.
- Program committee member in several conferences, including ICIP, ICME, and MMSP.