

Curriculum Vitae: Yannis Stylianou

CURRICULUM VITAE

PERSONAL INFORMATION **Ioannis (Yannis) Stylianou, Professor**

University of Crete Institute of Computer Science (ICS)
Computer Science Dept. Foundation for Research and
Knossos Ave. Technology - Hellas (FORTH)
GR-71409 Heraklion, Crete, Greece Nikolaou Plastira 100, Vassilika
Vouton
P.O Box 1385
GR-70013 Heraklion, Crete, Greece

Phone (+30) 2810 393 559 (+30) 2810 391 713
Fax (+30) 2810 393 501 (+30) 2810 391 601

yannis@csd.uoc.gr styliano@ics.forth.gr

Nationality Hellenic

Date of birth 11.29.1966

WORK EXPERIENCE

2011- 2012 Visiting Professor, University of the Basque Country, Bilbao, Spain

2011- Professor, University of Crete, Computer Science Dept., Greece

2002-2010 Associate Professor, University of Crete, Computer Science Dept., Greece

2003- Visiting Researcher, Institute of Computer Science, FORTH, Greece

2000- 2002 Technical Staff Member, Bell-Laboratories, Murray Hill, NJ, USA
Language Modeling Research Lab

1996-2000 Senior Technical Staff Member, AT&T-Laboratories, Florham Park, NJ, USA
Speech Processing Lab.

1995-1996 Assistant Professor, Ecole Superieure des Ingenieurs en Electronique et
Electrotechnique – ESIEE Paris, France

EDUCATION AND TRAINING

1992-1995 PhD, Ecole Nationale Superieure des Telecommunications
Departement Signal, ENST-Telecom Paris, France
*Harmonic plus Noise Models for Speech , Combined with Statistical Methods
for Speech and Speaker Modification*

1991-1992 Master of Science in Signal Processing
Departement Signal, ENST-Telecom Paris, France

Curriculum Vitae: Yannis Stylianou

1986- 1991 Diploma of Electrical Engineering, National Technical University of Athens.

MAIN RESEARCH CONTRIBUTION

- HNM: Harmonic plus Noise Model
- Voice Conversion using GMM.
- The Next-Gen TTS system of AT&T
- aQHM: Adaptive Quasi Harmonic Model

COMMITTEES

2009-2013 Elected Member of the Board of the International Speech Communication Association - ISCA

2009- IEEE Multimedia Communications Technical Committee

2007-2010 IEEE Speech and Language Technical Committee

2007-2011 Vice-Chairman, Management Committee of Action 2103: Advanced Voice Function Assessment

2005-2006 Member of the Management Committee of Action 277: Nonlinear Speech Processing

EDITORIAL

2009 Lead Guest Editor
IEEE Trans. On Speech Audio and Language Processing, Special Issue on Voice Transformation, Submission deadline April 1st, 2009

2008- Editorial Board, Journal of Electrical and Computer Engineering
Hindawi, <http://www.hindawi.com/journals/jece/>

2007- Co-Editor, Progress in Nonlinear Speech Processing
Springer, ISBN 3540715037, May 3 2007

2005- Associate Editor, EURASIP Journal on Speech and Audio Processing

2007- Associate Editor, EURASIP Research Letters in Signal Processing

1999-2002 Associate Editor, IEEE Signal Processing Letters

1995- Regular reviewer in Journals:

- IEEE Trans. On Speech and Audio Processing

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- IEEE Signal Processing Letters
- Journal of the Acoustical Society of America, JASA
- Elsevier, Speech Communication Magazine

- 1995- Regular reviewer for international conferences:
- IEEE ICASSP
 - ISCA Eurospeech/Interspeech
 - Eusipco
 - IEEE Workshop on Applications of Signal Processing to Audio and Acoustics

PROJECTS

- 2006-2009 France Telecom , R&D Department, Lannion, France
Basic Research on Speech Analysis
Contract No: 46135648
175kE
- 2007-2009 Dept of Defense, Air Force, USA
Voice Transformation and Detection
AF071-087,
Phase I: 75 kUSD
Phase II: 600 kUSD
- 2003-2007 E.U. IST, Network of Excellence: SIMILAR
150kE (partner's part)
- 2006-2008 Greek Ministry of Development, GSRT: TV++, Multimedia Indexing Systems
65 kE (partner's part)
- 2006-2008 Greek Ministry of Development, GSRT: AKMON: Analysis of Voice Pathology
150 kE
- 2006-2010 E.U. ESF, COST OFFICE:
VOICE: Advanced Voice Function Assessment
> 450kE
- 2010 Latsis Foundation: Automatic detection of murmurs in Children Phonocardiographic signals
12 kE
- 2010-2013 EE – FP7 FET-OPEN: LISTA: The Listening Talker:
585 kE (partner's part)
- 2010-2011 France Telecom , R&D Department, Lannion, France
Basic Research on Speech Analysis
Contract No: 50012310-A09141
40kE
- 2010-2013 France Telecom , R&D Department, Lannion, France
Basic Research on Speech Analysis
Contract No:

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30kE

CONFERENCE/SPECIAL SESSION ORGANIZATION

- | | |
|------------|---|
| 2005 | Chairman and Organizer
Workshop on Nonlinear Speech Processing, WNSP05, 20/09-23/09, Heraklion Crete |
| 2007 | Chairman and Organizer
1 st Workshop on Advanced Voice Quality Assessment, 27/04-29/04, 2007 Heraklion Crete |
| 2007 | Co-Chairman and Co-organizer
Special Session on: Objective assessment of voice and speech quality,
Interspeech 27-31 Aug. 2007 Antwerp, Belgium |
| 2009 | Chairman and Organizer
Special Session on: Voice Conversion,
IEEE ICASSP09, April 19-24, 2009, Taipei, Taiwan |
| 2009 | Co-Organizer
Thematic Symposium: Immersive Communication
IEEE ICASSP09, April 19-24, 2009, Taipei, Taiwan |
| 2009, 2011 | Area Chair/Coordinator:
1. Automatic Speech/Speaker Characterization and Modification
Interspeech 2009, Brighton, UK
2. Speech & Spoken Language Generation - Speech Synthesis,
Interspeech 2011, Florence, Italy
3. Speech Perception and Synthesis, Interspeech 2012, Portland Oregon |
| 2002- | Session Chair in:
IEEE ICASSP2002 (1 session),
IEEE ICASSP2008 (1 session),
IEEE ICASSP2009 (2 sessions),
IEEE ICASSP2010 (1 session),
IEEE ICASSP2011 (1 session),
Interspeech 2007 (1 session)
Interspeech 2009 (2 sessions)
Interspeech 2010 (1 session)
Interspeech 2011 (1 session) |

SPECIAL ISSUES

- | | |
|------|---|
| 2009 | Lead Guest Editor
IEEE Trans. On Speech Audio and Language Processing, Special Issue on Voice Transformation, Submission deadline April 1 st , 2009 |
| 2010 | Guest Editor
Speech Communication, Special Issue on Advanced Voice Function Assessment
Submission deadline September 15 th , 2010 |

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INVITED TUTORIALS/CHAPTERS

- 2000 Tutorial: Signal Processing for Speech Synthesis,
COST 258: The naturalness of synthetic speech, 23-24 Nov. 2000 , Maastricht,
Netherlands
- 2005 Chapter: Text-To-Speech Synthesis,
The Oxford Handbook of Computational Linguistics, Chapter 17, p.323-338,
Oxford University Press
Editor R. Mitkov
- 2005 Chapter: Modeling Speech based on Harmonic plus Noise Models,
Nonlinear Speech Modeling and Applications, Springer-Verlag. 2005, pp 244-260
Eds. G. Chellot, A. Esposito, M. Faundez, M, Marinaro.
- 2007 Tutorial: Voice Transformation,
Interspeech 27-31 Aug. 2007 Antwerp, Belgium
- 2007 Tutorial: Voice Conversion,
Faculty of Computer Science, Techn. Univ. of Graz, Austria, 26/09/2007
- 2008 Chapter: Voice Transformation,
Springer Handbook of Speech Processing and Speech Communications,
editors-in-chief: Jacob Benesty, Yiteng (Arden) Huang and M. Mohan Sondhi ,
pp. 489-503,
Springer, ISBN 978-3-540-49125-5.
- 2008 Tutorial: Speech Modeling and Modifications,
(23 hours) for Master programme in Telecommunications, University of the Basque
Country, July 2008, Bilbao, Spain
- 2008 Tutorial: Voice Transformation,
VJTH 2008, 12-14 Nov. 2008, Bilbao, Spain
- 2010 Tutorial: Speech Modifications,
7th Language and Technology Conference, Ljubljana, Slovenia
- 2011 Tutorial: Advances in Speech Signal Processing for Voice Quality Assessment,
(5 hours) for Master programme in Telecommunications, University of the Basque
Country, 29-30 Sept 2011, Bilbao, Spain

SUPERVISOR OF PHD THESES

- 2004-2007 Yannis Agiomyrziannakis, (now with Google Research, London, UK)
Sinusoidal Coding of Speech for Voice over IP
- 2005-2011 Maria Markaki,
Modulation Spectra and their application on Speech Processing
- 2006-2010 Yannis Pantazis, (now post Doc, Department of Mathematics and Statistics of the University of

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Massachusetts, Amherst)

Decomposition of AM-FM signals with Applications in Speech Signal Processing
(with Olivier Rosec, FT Orange Labs, France)

2006-2010 Andre Holzapfel, (now post Doc, INESC Porto, Music technology)
Similarity Methods for Computational Ethnomusicology.

2010- Giorgos Kafentzis,
Speech Modifications in a Quasi-Harmonic Environment.
(with Olivier Rosec, FT Orange Labs, France, and Olivier Boeffard, Univ. de Rennes I, France)

2011- Maria Koutsoyannaki,
Active Speech Modifications

POST DOCTORAL RESEARCH FELLOWS

2011- Vassilios Tsiaras,
Time-Frequency Analysis of Signals

2011- Gilles Degottex
Speech Modifications

2010-2011 Chang Heon Lee
Speech Coding for TTS (with Olivier Rosec, FT Orange Labs, France)

2010- Yannis Pantazis
Mathematical Modeling of Speech Signals

IN PHD THESES COMMITTEE (THE MOST RECENT)

2011

Christian Fischer Pedersen
Non-parametric Speech Waveform Representations, Aalborg University, Denmark, (External Examiner and member of the committee)

Elisabeth Godoy
Spectral Envelope Transformation for High-Quality Voice Conversion
Télécom Bretagne/Université de Rennes 1
(External Examiner and member of the committee)

Didier Cadic
Optimisation du procede de creation de voix en synthese par selection
Universite Paris-Sud 11 (Member of the committee)

Thomas Dubuisson
Glottal Source Estimation and Automatic Detection of Voice Pathologies, University of Mons, Belgium (External Examiner and member of the committee)

2010

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Thomas Drugman

Advances in Glottal Analysis and its Applications, University of Mons, Belgium (External Examiner and member of the committee)

Fabien Ringeval

Ancrages et modèles dynamique de la prosodie: application à la reconnaissance des émotions actées et spontanées, Pierre and Marie Curie University, Paris 6, France. (External Examiner and member of the committee)

Gilles Degottex

Glottal source and vocal-tract separation, Pierre and Marie Curie University, Paris 6, France. (External Examiner and member of the committee)

Larbi Mesbahi

Transformation automatique de la parole – Etude des Transformations acoustiques, University de Rennes I, France. (External Examiner and member of the committee)

Fernando Villavicencio Marquez

Conversion de la voix de haute qualite, Pierre and Marie Curie University, Paris 6, France. (External Examiner and member of the committee)

2009

Marius Kašėta

Development and Assessment of Automated Categorization System for Organic Laryngeal Diseases, Kaunas University of Medicine, Lithuania. (External Examiner).

Michael Stark

Source-Filter Based Single Channel Speech Separation, Graz University of Technology, Austria. (External Examiner and member of the committee)

Athanassios Katsamanis

Nonlinear Computational Speech Modeling with Elements of Aerodynamics of the Vocal Tract National Technical University of Athens, Greece (Member of the Committee).

PATENTS

1. Yannis Stylianou and Alex Kain:
Stochastic Modeling Of Spectral Adjustment For High Quality Pitch Modification
U.S. Patent # 6910007, June 21st, 2005.
2. Yannis Stylianou, David Kapilow and Juergen Schroeter:
Automatic detection of non-stationarity in speech signals.
U.S. Patent # 6535843, March 18th, 2003.
3. Yannis Stylianou:
Simple and Fast Way for Generating a Harmonic Signal.
U.S. Patent # 6466903, Oct. 15th 2002.
4. Yannis Stylianou:
Voice Quality Compensation System for Speech Synthesis Based on Unit-Selection Speech Database.
U.S. Patent # 6266638, July 24th 2001.
5. Yannis Stylianou, David Kapilow and Juergen Schroeter:
Signal Dependent Speech Modifications.
U.S. Patent # 6324501, Nov. 27th 2001.
6. M.C. Beutnagel, D.A. Kapilow, Y. Stylianou, A.K. Syrdal:
Employing speech models in concatenative speech synthesis.
U.S. Patent # 6950798, Sep. 27th 2005.
7. Yannis Stylianou:
Center of Gravity in Processing of Speech Signals.
U.S. Patent Append, Filed Nov. 27th 1998.
8. Yannis Stylianou:
Speech Frame Synchronization Using Differentiated Phase.
U.S. Patent Append, Filed January 10th 1999.
9. Yannis Stylianou:
A first lag correlative spectrum function for the synchronization of speech frames.
U.S. Patent Append, Filed July 28th 1999.

PUBLICATIONS

CHAPTERS

1. Thierry Dutoit, Varvara Kandia and Yannis Stylianou:
How can marine biologists track sperm whales in the oceans?
Chapter in *Applied Signal Processing: A MATLAB-Based Proof of Concept*,
Thierry Dutoit and Ferran Marques,
Springer; 1st edition (May 15, 2009), ISBN: 0387745343
2. Yannis Stylianou:
Voice Transformation
Invited Chapter in:
Springer Handbook of Speech Processing and Speech Communications, pp. 489-503, editors-in-chief: Jacob Benesty,
Yiteng (Arden) Huang and M. Mohan Sondhi
Springer, ISBN 978-3-540-49125-5, 2008.
3. Yannis Pantazis and Yannis Stylianou:
On the Detection of Discontinuities in Concatenative Speech Synthesis
Springer Lecture Notes in Computer Sciences: Progress in Non Linear Speech Processing ,
Volume Editors: Yannis Stylianou, Marcos Faundez Zanuy and Anna Esposito,
Springer, ISBN 3540715037, May 3 2007
4. Maria Markaki and Yannis Stylianou:
Extraction of Speech-relevant Information from Modulation Spectrograms
Springer Lecture Notes in Computer Science: Progress in Non Linear Speech Processing,
Volume Editors: Yannis Stylianou, Marcos Faundez Zanuy and Anna Esposito,
Springer, ISBN 3540715037, May 3 2007
5. Yannis Stylianou:
Modeling Speech based on Harmonic plus Noise Models.
Invited Chapter in *Nonlinear Speech Modeling and Applications*, Springer-Verlag. 2005, pp 244-260
Eds. G. Chellot, A. Esposito, M. Faundez, M, Marinaro.
6. Yannis Pantazis and Yannis Stylianou:
Non linear approaches to the detection of discontinuities in concatenative speech synthesis
Chapter in *Nonlinear Speech Modeling and Applications*, Springer-Verlag. 2005, pp. 375-383
Eds. G. Chellot, A. Esposito, M. Faundez, M, Marinaro.
7. Thierry Dutoit and Yannis Stylianou:
Text-to-Speech Synthesis.

Curriculum Vitae: Yannis Stylianou

Invited Chapter in The Oxford Handbook of Computational Linguistics, Editor R. Mitkov, Oxford University Press, 2003, Chapter 17, p.323-338.

JOURNALS

22. Sevasti-Zoi Karakozoglou, Nathalie Henrich, Christophe d'Alessandro, and Yannis Stylianou:
Automatic glottal segmentation using local-based active contours
Accepted to Speech Communication, Special Issue on Advanced voice Function Assessment, Sept 2011.
21. Devora Kiagiadaki, Theognosia Chimona, Gregory Chlouverakis, Yannis Stylianou, Efklidis Proimos, Chariton Papadakis, John Bizakis:
Evaluating the outcome of phonosurgery: comparing the role of VHI and VoISS questionnaires in the Greek language.
Accepted to Journal of Voice, Aug 2011,
[doi:10.1016/j.jvoice.2011.05.002](https://doi.org/10.1016/j.jvoice.2011.05.002)
20. Yannis Pantazis, Olivier Rosec, and Yannis Stylianou:
Reply to "Iterative Estimation of Sinusoidal Signal Parameters"
IEEE Signal Processing Letters, pp. 1024-1026, Vol.17, No.12, Dec 2010
19. J.D. Arias-Londono, J.I. Godino-Llorente, M. Markaki, and Y. Stylianou:
On combining information from Modulation Spectra and Mel-Frequency Cepstral coefficients for Automatic Detection of Pathological Voices
Logopedics, Phoniatrics, Vocology (LPV) Vol.36, Issue 2, pp. 60-69, Jul 2011 doi:10.3109/14015439.2010.528788
18. Maria Markaki and Yannis Stylianou:
Voice Pathology Detection and Discrimination based on Modulation Spectral Features
IEEE Trans. on Audio, Speech and Language Processing, Vol.19, Issue 7, pp 1938-1948, Sept 2011
17. Maria Markaki and Yannis Stylianou:
Discrimination of Speech from Nonspeech in Broadcast News Based on Modulation Frequency Features
Speech Communication: Special Issue on Perceptual and Statistical Audition, *Speech Communication, Volume 53, Issue 5, May-June 2011, Pages 726-735*
16. Yannis Pantazis, Olivier Rosec, and Yannis Stylianou:
Adaptive AM-FM Signal Decomposition with Application to Speech Analysis
IEEE Trans. on Audio, Speech and Language Processing, Vol.19, No.2, Feb 2011, pp 290-300.

15. Yannis Pantazis, Olivier Rosenc, and Yannis Stylianou:
Iterative Estimation of Sinusoidal Signal Parameters
IEEE Signal Processing Letters, Vol.17, No.5, May 2010, pp 461-464
14. Emmanouil Benetos and Yannis Stylianou:
Auditory spectrum-based pitched instrument onset detection.
IEEE Trans. on Audio, Speech and Language Processing, Vol.18, No.8, Nov 2010, pp 1968-1977
13. Andre Holzapfel and Yannis Stylianou:
Scale Transform in Rhythmic similarity of Music.
IEEE Trans. on Audio, Speech and Language Processing, Vol. 19, No.1, pp 176-185, Jan. 2011
12. Andre Holzapfel, Yannis Stylianou, Ali C. Gedik, and Baris, Bozkurt:
Three dimensions of pitched instrument onset detection
IEEE Trans. on Audio, Speech and Language Processing, Vol. 18, No.6, pp 1517-1527, Aug. 2010
11. Milos Vassilakis and Yannis Stylianou
Voice Pathology Detection based on Short-Time Jitter Estimations in Running Speech
Folia Phoniatria et Logopaedica, Vol.61, No.3, pp 153-170, 2009
DOI: 10.1159/000219951
10. Milos Vassilakis and Yannis Stylianou
Spectral jitter modeling and estimation
Elsevier Biomedical Signal Processing and Control. Special Issue: M&A of Vocal Emissions, 2009,
DOI: 10.1016/j.bspc.2009.02.001
9. Yannis Agiomyrgiannakis and Yannis Stylianou
Wrapped Gaussian Mixture Models for Modeling and High-Rate Quantization of Phase Data of Speech
IEEE Trans on. Audio, Speech and Language Processing, Vol.17, No.4, pp 775-786, 2009
8. Varvara Kandia and Yannis Stylianou:
Detection of Clicks based on Group Delay
Canadian Acoustics, vol.36, no.1, pp 48-54, 2008
Special Issue on Marine Mammals Detection and Classification.
7. Andre Holzapfel and Yannis Stylianou:
Musical genre classification using Non-negative Matrix Factorization based features
IEEE Trans. on Audio, Speech and Language Processing, Vol. 16(2), pp. 424-434, Feb 2008.
6. Yannis Agiomyrgiannakis and Yannis Stylianou:
Conditional Vector Quantization for Speech Coding
IEEE Trans. on Audio, Speech and Language Processing, Vol. 15(2), pp. 377-386, Feb 2007.
5. Kandia Varvara and Yannis Stylianou:

Curriculum Vitae: Yannis Stylianou

Detection of sperm whale clicks based on the Teager-Kaiser Energy Operator

Applied Acoustics N.67 pp 1144-1163, 2006.

4. Yannis Stylianou:

Applying the Harmonic plus Noise Model in Concatenative Speech Synthesis.

IEEE Trans. Speech and Audio Processing, 9(1):21-29, 2001

3. Yannis Stylianou:

Removing Linear Phase Mismatches in Concatenative Speech Synthesis.

IEEE Trans. Speech and Audio Processing, 9(3):232-239, 2001

2. Yannis Stylianou:

A simple and fast way for generating a harmonic signal

IEEE Signal Processing Letters, Vol.7 Number 5, May 2000.

1. Yannis Stylianou, Olivier Cappe and Eric Moulines:

Continuous Probabilistic Transform for Voice Conversion.

IEEE Trans. on Speech and Audio Processing, vol6(2), pp. 131-142, March 1998.

CONFERENCES

87. Chang-Heon Lee, Olivier Rosec, and Yannis Stylianou,

A hybrid quasi-harmonic/CELP wideband speech coding scheme for unit selection TTS synthesis,

ISCA Interspeech 2011, Florence, Italy, Aug 2011

86. Maria Koutsoyannaki, Yannis Pantazis, Yannis Stylianou, and Philippe Dejonckere

Tremor in speakers with spasmodic dysphonia,

MAVEBA-2011, Florence Italy, Aug 2011

85. George Kafentzis, Yannis Stylianou and Paavo Alku,

Glottal inverse filtering using stabilised weighted linear prediction,

IEEE ICASSP-2011, Prague, Czech Republic, May 2011

84. Yannis Agiomyrgiannakis and Yannis Stylianou,

On the recovery of time-varying spectral envelope information from aQHM-derived spectra,

IEEE ICASSP-2011, Prague, Czech Republic, May 2011

83. R. Peharz, M. Stark, F. Pernkopf, and Y. Stylianou

A Factorial Sparse Coder Model for Single Channel Source Separation,

Interspeech 2010, Chiba, Japan, Sept. 2010

Selected Paper (top 3% papers) for Speech Communication

82. G. Tzedakis, Y. Pantazis, O. Rosec, and Y. Stylianou

Fast Least-Squares Solution for Sinusoidal, Harmonic and Quasi-Harmonic Models,

Interspeech 2010, Chiba, Japan, Sept. 2010

81. Andre Holzapfel and Yannis Stylianou,
PARATAXIS: Morphological Similarity in Traditional Music,
ISMIR2010, Utrecht, August 2010
80. Maria Markaki and Yannis Stylianou,
Modulation Spectral Features for Objective Voice Quality Assessment,
IEEE Proceedings of ISCCSP, Limassol, Cyprus, March 2010.
79. Yannis Pantazis, Olivier Rosec and Yannis Stylianou,
Analysis/Synthesis of speech based on an Adaptive Quasi-Harmonic plus Noise Model,
IEEE ICASSP-2010, Dallas Texas, USA, March 2010
78. Yannis Pantazis, Olivier Rosec and Yannis Stylianou,
On the robustness of the Quasi-Harmonic Model of Speech,
IEEE ICASSP-2010, Dallas Texas, USA, March 2010
77. M. Markaki, Y. Stylianou, J.D. Arias-Londono, J.I. Godino-Liorente,
Dysphonia Detection based on Modulation Spectral Features and Cepstral Coefficients,
IEEE ICASSP-2010, Dallas Texas, USA, March 2010
76. Maria Markaki and Yannis Stylianou,
Modulation Spectral Features for objective Voice Quality assessment: the Breathiness case,
MAVEBA-2009, Florence, Italy, 14-16 Dec, 2009.
75. Yannis Pantazis, Maria Koutsoyannaki and Yannis Stylianou,
A novel method for the extraction of vocal tremor,
MAVEBA-2009, Florence, Italy, 14-16 Dec, 2009.
74. Emmanouil Benetos and Yannis Stylianou,
Pitched Instrument Onset Detection Based On Auditory Spectra
ISMIR 2009, Oct. 26-30, Kobe Japan
73. Andre Holzapfel and Yannis Stylianou,
Rhythmic similarity in traditional Turkish music
ISMIR 2009, Oct. 26-30, Kobe Japan
72. Maria Markaki, and Yannis Stylianou
Evaluation of Modulation Frequency Features for Speaker Verification and Identification
EUSIPCO 2009, Glasgow, Scotland, 24-28 August 2009
71. Vassilis Tsiaras, Costas Panagiotakis, and Yannis Stylianou
Video and Audio Based Detection of Filled Hesitation Pauses in Classroom Lectures
EUSIPCO 2009, Glasgow, Scotland, 24-28 August 2009
70. Maria Markaki, and Yannis Stylianou
Normalized Modulation Spectral Features for Cross-Database Voice Pathology Detection
Interspeech 2009, Brighton, UK, Sept. 2009

69. Yannis Pantazis, Olivier Rosec, and Yannis Stylianou
AM-FM Estimation for Speech based on a Time-Varying Sinusoidal Model
Interspeech 2009, Brighton, UK, Sept. 2009
68. Maria Markaki, and Yannis Stylianou
Using Modulation Spectra for Voice Pathology Detetction and Classification
IEEE EMBC2009, Minneapolis, MI, USA 2009
67. Miltiadis Vasilakis and Yannis Stylianou
Spectral Jitter Estimation Revisited
3rd Advanced Voice Function Assessment International Workshop, pp. 37-40, May 2009, Madrid
66. Miltiadis Vasilakis and Yannis Stylianou
Novel Short-Time Jitter Features for Monitoring of Running Speech
3rd Advanced Voice Function Assessment International Workshop, pp. 41-44, May 2009, Madrid
65. Yannis Pantazis, Miltiadis Vasilakis, and Yannis Stylianou
Jitter and Shimmer modeling based on a Time-Varying Sinusoidal Model of Speech
3rd Advanced Voice Function Assessment International Workshop, pp. 33-36, May 2009, Madrid
64. Maria Markaki and Yannis Stylianou
Voice Pathology Detection and Classification based on Modulation Spectra
3rd Advanced Voice Function Assessment International Workshop, pp. 153-156, May 2009, Madrid
63. Yannis Pantazis, Olivier Rosec and Yannis Stylianou
Time-Frequency representation of pathologic signals based on a Quasi-Harmonic Model of Speech
3rd Advanced Voice Function Assessment International Workshop, pp. 157-160, May 2009, Madrid
62. Yannis Stylianou
Voice Transformation: A survey
IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), Taipei, Taiwan, 2009
61. Yannis Pantazis, Olivier Rosec, and Yannis Stylianou
Chirp rate estimation of speech based on a time-varying quasi-harmonic model
IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), Taipei, Taiwan, 2009
60. Andre Holzapfel and Yannis Stylianou
A scale transform based method for rhythmic similarity of music
IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), Taipei, Taiwan, 2009

59. Varvara Kandia, Yannis Stylianou, and Thierry Dutoit
Improve the accuracy of TDOA measurement using the Teager-Kaiser Energy operator
IEEE Passive08, Hyères, French Riviera , France. October 14-17, 2008
58. Varvara Kandia and Yannis Stylianou
A Phase based detector of whale clicks
IEEE Passive08, Hyères, French Riviera , France. October 14-17, 2008
57. Andre Holzapfel and Yannis Stylianou,
Rhythmic Similarity of Music based on Dynamic Periodicity Warping
IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), Las Vegas, USA, 2008
56. Andre Holzapfel and Yannis Stylianou,
Beat tracking using group delay based onset detection
ISMIR 2008, Philadelphia, USA
55. M. Markaki, A. Holzapfel, and Y. Stylianou,
Singing voice detection using modulation frequency features
Proceedings of ISCA Tutorial and Research Workshop on Statistical and Perceptual Audition - SAPA 2008, Brisbane, Australia, 2008
54. Yannis Pantazis, Olivier Rossec and Yannis Stylianou,
On the properties of a time-varying quasi-harmonic model of speech
Proceedings of InterSpeech, Brisbane, Australia, September 2008.
53. M. Markaki M., and Y. Stylianou
Dimensionality Reduction of Modulation Frequency Features for Speech Discrimination
Proceedings of InterSpeech, Brisbane, Australia, September 2008.
52. M. Markaki and Y. Stylianou
Discrimination of Speech from nonspeech in broadcast news based on modulation frequency features
ISCA Tutorial and Research Workshop (ITRW) on "Speech Analysis and Processing for Knowledge Discovery", Aalborg, Denmark, 2008
51. Yannis Pantazis, Olivier Rossec and Yannis Stylianou,
On the estimation of speech harmonic model
ISCA Tutorial and Research Workshop (ITRW) on "Speech Analysis and Processing for Knowledge Discovery", Aalborg, Denmark, 2008
50. Yannis Pantazis and Yannis Stylianou,
Improving the modelling of the noise part in the Harmonic plus Noise Model of speech
IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP) , 2008, Las Vegas, USA
49. Miltiadis Vassilakis, and Yannis Stylianou:
A mathematical model for accurate measurement of jitter

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Proceedings *MAVEBA 2007*, 13-15 Dec 2007, Florence, Italy.

48. M. Markaki, A. Karpov, E. Apostolopoulos, M. Astrinaki, and Y. Stylianou
A Hybrid System for Audio Segmentation and Speech-Endpoint Detection of Broadcast News
In Proc. of XIIth Int. Conference Speech and Computer, SPECOM, Moscow, Russia, 2007, pp. 691-696.
47. Michael Wohlmayr, Maria Markaki, and Yannis Stylianou:
Speech - Nonspeech Discrimination based on Speech-Relevant Spectrograms Modulations
Eusipco 2007, 3-7 Sep 2007, Poznan, Poland
46. Yannis Agiomyrgiannakis and Yannis Stylianou:
The Harmonic Model Codec (HMC) framework for VoIP
Interspeech 28-31 August 2007, Antwerp, Belgium.
45. Yannis Agiomyrgiannakis and Yannis Stylianou:
Bit-Erasure Channel Decoding for GMM-based Multiple Description Coding
Interspeech 28-31 August 2007, Antwerp, Belgium.
44. Andre Holzapfel and Yannis Stylianou:
Singer Identification in Rembetiko Music
Proc. SMC'07, 4th Sound and Music Computing Conference, 11-13 July 2007, Lefkada, Greece, pp 326-329
43. Maria Markaki, Michael Wohlmayr, and Yannis Stylianou:
Speech - Nonspeech Discrimination using the Information Bottleneck Method and Spectro-Temporal Modulation Index
Interspeech 28-31 August 2007, Antwerp, Belgium
42. T. Dutoit, A. Holzapfel, M. Jottrand, A.Moinet, J. Perez, and Y. Stylianou:
Towards a Voice Conversion System based on Frame Selection.
IEEE International Conference on Acoustics, Speech and Signal Processing, ICASSP 2007, Hawai, USA 2007.
41. Andre Holzapfel and Yannis Stylianou:
A Statistical Approach to Musical Genre Classification Using Non-Negative Matrix Factorization.
IEEE International Conference on Acoustics, Speech and Signal Processing, ICASSP 2007, Hawai, USA 2007.
40. Yannis Agiomyrgiannakis and Yannis Stylianou:
Stochastic Modeling and Quantization of Harmonic Phases in Speech Using Wrapped Gaussian Mixture Models.
IEEE International Conference on Acoustics, Speech and Signal Processing, ICASSP 2007, Hawai, USA 2007.
39. Athanasios Mouchtaris, Yannis Agiomyrgiannakis and Yannis Stylianou:
Conditional Vector Quantization For Voice Conversion
IEEE International Conference on Acoustics, Speech and Signal Processing, ICASSP 2007, Hawai, USA 2007.
38. Milos Vassilakis, Yannis Agiomyrgiannakis and Yannis Stylianou:
Fast Analysis/Synthesis of Harmonic Signals
IEEE International Conference on Acoustics, Speech and

Curriculum Vitae: Yannis Stylianou

Signal Processing, ICASSP 2006, Toulouse, France 2006.

37. Kandia Varvara and Yannis Stylianou:
Accurate TDOA using the Teager-Kaiser Energy Operator
26th Conference of the European Cetacean Society
Kdynia, Poland 2006.
36. Kandia Varvara and Yannis Stylianou:
Detection of Creak Clicks of Sperm Whales in Low SNR conditions
Proc. IEEE Oceans 2005, Brest, France, 2005
35. Kandia Varvara and Yannis Stylianou:
Detection of Sperm Whales Clicks based on the Teager Kaiser Energy Operator
2nd Int. Workshop on Detection and Localization of Marine Mammals using Passive Acoustics, Monaco 2005
34. Yannis Pantazis, Yannis Stylianou and Esther Klabbbers:
Discontinuity Detection in Concatenated Speech Synthesis Based on Nonlinear Speech Analysis
Interspeech 2005- Eurospeech, Lisboa, Portugal, 2005
33. Yannis Agiomirgiannakis and Yannis Stylianou:
Coding with Side Information techniques for LSF reconstruction in Voice Over IP
IEEE International Conference on Acoustics, Speech and Signal Processing, ICASSP 2005, Philadelphia, PA, USA 2005.
32. Yannis Agiomirgiannakis and Yannis Stylianou:
Combined Estimation/Coding of Highband Spectral Envelopes For Speech Spectrum Expansion
IEEE International Conference on Acoustics, Speech and Signal Processing, ICASSP 2004, Montreal Quebec, Canada 2004.
31. Yannis Stylianou and Ann K. Syrdal:
Perceptual and Objective Detection of Discontinuities in Concatenative Speech Synthesis.
IEEE International Conference on Acoustics, Speech and Signal Processing, ICASSP 2001, Salt Lake City, 2001.
30. A. K. Syrdal, C. Wightman, A. Conkie, Y. Stylianou, M. Beutnagel, J. Schroeter, V. Strom, K.S. Lee and M. J. Makashay:
Corpus-based techniques in the AT&T NextGen synthesis system.
Sixth International Conference on Spoken Language Processing ICSLP 2000, Oct 16-20, 2000, Beijing, China.
Invited paper.
29. Schroeter, J., Ostermann, J., Graf, H. P., Beutnagel, M., Cosato, E., Syrdal, A., Conkie, A. and Stylianou, Y.:
Multimodal speech synthesis
IEEE, Conference on Multimedia and Expo, ICME 2000, New York, 2000, pp. MPS11.3.
Invited paper.
28. Yannis Stylianou:

On the Implementation of the Harmonic Plus Noise Model for Concatenative Speech Synthesis.

IEEE International Conference on Acoustics, Speech and Signal Processing 2000, Istanbul, Turkey.

27. Alex Kain and Yannis Stylianou:

Stochastic Modeling of Spectral Adjustment for High Quality Pitch Modification.

IEEE International Conference on Acoustics, Speech and Signal Processing 2000, Istanbul, Turkey.

26. Yannis Stylianou:

Synchronization of speech frames based on phase data with application to concatenative speech synthesis.

6th European Conference on Speech Communication and Technology, Sept. 5-9, 1999, Budapest, Hungary, Vol.5, p.2343-2346.

25. David Kapilow, Yannis Stylianou and Juergen Schroeter:

Detection of non-stationarity in speech signals and its application to time-scaling.

6th European Conference on Speech Communication and Technology, Sept. 5-9, 1999, Budapest, Hungary, Vol.5, p.2307-2310.

24. Ilija Zeljkovic and Yannis Stylianou:

Single Complex Sinusoid and ARHE Model based Pitch Extractors.

6th European Conference on Speech Communication and Technology, Sept. 5-9, 1999, Budapest, Hungary, Vol.6, p.2813-2816.

23. Yannis Stylianou:

Analysis of Voiced Speech using Harmonic Models.

137th meeting of the Acoustical Society of America, Berlin, March 14-19, 1999. Invited paper.

22. M.C. Beutnagel, A.D. Conkie, J. Schroeter, Y. Stylianou, A. K. Syrdal:

The AT&T Next-Gen TTS System.

137th meeting of the Acoustical Society of America, Berlin, March 14-19, 1999.

21. Yannis Stylianou:

Assessment and correction of voice quality variabilities in large speech databases for concatenative speech synthesis.

IEEE International Conference on Acoustics, Speech and Signal Processing, ICASSP 1999, Phoenix, Arizona, USA.

20. Yannis Stylianou:

Removing phase mismatches in concatenative speech synthesis.

Third ESCA Speech Synthesis Workshop, Jenolan Caves, Australia, p.267-272, Nov. 1998.

19. Yannis Stylianou:

Concatenative speech synthesis using a Harmonic plus Noise Model

Third ESCA Speech Synthesis Workshop, Jenolan Caves, Australia, Nov. 1998.

18. Ping-Fai Yang, Yannis Stylianou:

Real time voice alteration based on linear prediction.

Fifth International Conference on Spoken Language Processing ICSLP 98, 30 Nov-4 Dec, 1998, Sydney, Australia.

17. Ann K. Syrdal, Alistair Conkie, Yannis Stylianou:
Exploration of acoustic correlates in speaker selection for concatenative synthesis.
Fifth International Conference on Spoken Language Processing ICSLP 98, 30 Nov-4 Dec, 1998, Sydney, Australia.
16. Yannis Stylianou:
On the harmonic analysis of speech.
IEEE International Symposium on Circuits and Systems, May 31-June 3, 1998, Monterey, California, USA.
15. Thomas Eriksson, Hong-Goo Kang and Yannis Stylianou:
Quantization of the Spectral Envelope for Sinusoidal Coders.
IEEE International Conference on Acoustics, Speech and Signal Processing 1998, Seattle, Washington, USA, pp. 37-40.
14. Yannis Stylianou and Olivier Cappe:
A system for voice conversion based on probabilistic classification and a Harmonic plus Noise Model.
IEEE International Conference on Acoustics, Speech and Signal Processing 1998, Seattle, Washington, USA, pp. 281-284.
13. Ann Syrdal, Yannis Stylianou, Laurie Garrison, Alistair Conkie and Juergen Schroeter:
TD-PSOLA versus Harmonic plus Noise Model in diphone based speech synthesis.
IEEE International Conference on Acoustics, Speech and Signal Processing 1998, Seattle, Washington, USA, pp. 273-276.
12. A.Syrdal, A. Conkie, Y. Stylianou, J. Schroeter, L. Garrison, D. Dutton:
Voice Selection for Speech Synthesis.
Journal Acoustical Society of America, 102(5), November 1997.
11. Y.Stylianou, T.Dutoit, J.Schroeter.
Diphones Concatenation using a Harmonic plus Noise Model of Speech.
EUROSPEECH-97, Rodos, Greece, Sept. 1997, pp. 613-616.
10. Y.Stylianou:
Splitting speech into periodic and non-periodic parts using Harmonic plus Noise Models.
In HA61530000-961220-01TM, Murray Hill, N.J., USA, 1996. Technical Memorandum, AT&T Labs Research.
9. Y.Stylianou:
Decomposition of Speech Signals into a Deterministic and a Stochastic part.
International Conference on Spoken Language Processing ICSLP 96, October 3-6, Philadelphia, USA.
8. Y.Stylianou:
A Pitch and Maximum Voiced Frequency Estimation Technique adapted to Harmonic Models of Speech.
IEEE Nordic Signal Processing Symposium, Helsinki, Finland, Sept. 1996

7. Y.Stylianou:
Decomposition of Speech Signals into a Periodic and a non-Periodic part based on Sinusoidal Models.
IEEE International Conference on Circuits, and Systems, ICECS 96, Rodos, Greece, Oct. 1996.
6. G. Baudoin and Y.Stylianou:
On the transformation of the speech spectrum for voice conversion.
International Conference on Spoken Language Processing ICSLP 96, October 3-6, Philadelphia, USA.
5. Y.Stylianou:
Efficient Decomposition of Speech Signals into a Deterministic and a stochastic part.
International Symposium on Signal Processing and its Applications, IEEE ISSPA 96, August 26-28, Gold Coast, Australia.
4. Y.Stylianou, O.Cappe and E.Moulines:
Statistical Methods for Voice Quality Transformation.
EUROSPEECH-95, Madrid, Spain, 1995.
3. Y.Stylianou, J.Laroche and E.Moulines:
High-quality speech modification based on a Harmonic plus noise model.
EUROSPEECH-95, Madrid, Spain, 1995.
2. J.Laroche, Y.Stylianou and E.Moulines.
HNS: Speech Modification based on a harmonic+noise model.
Proc IEEE ICASSP-93, Minneapolis, USA, Apr. 1993
1. J.Laroche, Y Stylianou and E.Moulines.
HNM: A simple, efficient harmonic plus noise model for speech.
IEEE ASSP Workshop on app. of sig. proc. to audio and acoust., Mohonk, USA, Oct.1993