

WELCOME TO SPEECH PROCESSING COURSES  
IN CRETE SPCC2014  
THE 1ST ISCA SUMMER SCHOOL

Yannis Stylianou

University of Crete, Computer Science Dept., Greece,  
and  
Toshiba Cambridge Research Lab, UK  
yannis@csd.uoc.gr, yannis.stylianou@crl.toshiba.co.uk

SPCC 2014

① ISCA

② UNIVERSITY OF CRETE

③ COMPUTER SCIENCE DEPARTMENT

④ SPCC 2014

# INTERNATIONAL SPEECH COMMUNICATION ASSOCIATION

- ISCA: a non-profit organization  
<http://www.isca-speech.org/>
- The biggest international association, *solely* dedicated to promote research on speech communication science and technology since 1988 (at that time ESCA, ISCA since 1999).
- ISCA Board: 13 members and president: Prof. Tanja Schultz (Karlsruhe Institute of Technology, Germany).
- Major event: Interspeech but also many other activities
- Special Interest Groups (SIGs): to encourage interest and activity in specific areas within the broad field of the Association
- ISCA-Pad: News, Jobs

# INTERNATIONAL SPEECH COMMUNICATION ASSOCIATION

- ISCA: a non-profit organization  
<http://www.isca-speech.org/>
- The biggest international association, *solely* dedicated to promote research on speech communication science and technology since 1988 (at that time ESCA, ISCA since 1999).
- ISCA Board: 13 members and president: Prof. Tanja Schultz (Karlsruhe Institute of Technology, Germany).
- Major event: Interspeech but also many other activities
- Special Interest Groups (SIGs): to encourage interest and activity in specific areas within the broad field of the Association
- ISCA-Pad: News, Jobs

# INTERNATIONAL SPEECH COMMUNICATION ASSOCIATION

- ISCA: a non-profit organization  
<http://www.isca-speech.org/>
- The biggest international association, *solely* dedicated to promote research on speech communication science and technology since 1988 (at that time ESCA, ISCA since 1999).
- ISCA Board: 13 members and president: Prof. Tanja Schultz (Karlsruhe Institute of Technology, Germany).
- Major event: Interspeech but also many other activities
- Special Interest Groups (SIGs): to encourage interest and activity in specific areas within the broad field of the Association
- ISCA-Pad: News, Jobs

# INTERNATIONAL SPEECH COMMUNICATION ASSOCIATION

- ISCA: a non-profit organization  
<http://www.isca-speech.org/>
- The biggest international association, *solely* dedicated to promote research on speech communication science and technology since 1988 (at that time ESCA, ISCA since 1999).
- ISCA Board: 13 members and president: Prof. Tanja Schultz (Karlsruhe Institute of Technology, Germany).
- Major event: Interspeech but also many other activities
- Special Interest Groups (SIGs): to encourage interest and activity in specific areas within the broad field of the Association
- ISCA-Pad: News, Jobs

# INTERNATIONAL SPEECH COMMUNICATION ASSOCIATION

- ISCA: a non-profit organization  
<http://www.isca-speech.org/>
- The biggest international association, *solely* dedicated to promote research on speech communication science and technology since 1988 (at that time ESCA, ISCA since 1999).
- ISCA Board: 13 members and president: Prof. Tanja Schultz (Karlsruhe Institute of Technology, Germany).
- Major event: Interspeech but also many other activities
- Special Interest Groups (SIGs): to encourage interest and activity in specific areas within the broad field of the Association
- ISCA-Pad: News, Jobs

# INTERNATIONAL SPEECH COMMUNICATION ASSOCIATION

- ISCA: a non-profit organization  
<http://www.isca-speech.org/>
- The biggest international association, *solely* dedicated to promote research on speech communication science and technology since 1988 (at that time ESCA, ISCA since 1999).
- ISCA Board: 13 members and president: Prof. Tanja Schultz (Karlsruhe Institute of Technology, Germany).
- Major event: Interspeech but also many other activities
- Special Interest Groups (SIGs): to encourage interest and activity in specific areas within the broad field of the Association
- ISCA-Pad: News, Jobs



# ISCA: OBJECTIVES

- to stimulate scientific research and education
- to organize conferences, courses and workshops,
  - Conferences: Interspeech Singapore 2014, Dresden 2015, San-Francisco 2016
  - Courses: Training Schools, Lectures
  - Workshops: ISCA Tutorial and Research Workshops ITRWs (mainly satellites of Interspeech)
- to publish, and to promote publication of scientific works,
  - Elsevier: Speech communication, Computer Speech and Language
  - ISCA Archive
- to promote the exchange of scientific views
  - Grants: Support students and young scientists (age  $\leq$  35) to participate in workshops and conferences organized or supported by ISCA.
  - ISCA Distinguished Lecturers. For 2014: Prof. R. Moore (UK), Prof. C. Best (Australia)
- to investigate industrial applications of research results

# ISCA: OBJECTIVES

- to stimulate scientific research and education
- to organize conferences, courses and workshops,
  - Conferences: Interspeech Singapore 2014, Dresden 2015, San-Francisco 2016
  - Courses: Training Schools, Lectures
  - Workshops: ISCA Tutorial and Research Workshops ITRWs (mainly satellites of Interspeech)
- to publish, and to promote publication of scientific works,
  - Elsevier: Speech communication, Computer Speech and Language
  - ISCA Archive
- to promote the exchange of scientific views
  - Grants: Support students and young scientists (age  $\leq$  35) to participate in workshops and conferences organized or supported by ISCA.
  - ISCA Distinguished Lecturers. For 2014: Prof. R. Moore (UK), Prof. C. Best (Australia)
- to investigate industrial applications of research results

# ISCA: OBJECTIVES

- to stimulate scientific research and education
- to organize conferences, courses and workshops,
  - Conferences: Interspeech Singapore 2014, Dresden 2015, San-Francisco 2016
  - Courses: Training Schools, Lectures
  - Workshops: ISCA Tutorial and Research Workshops ITRWs (mainly satellites of Interspeech)
- to publish, and to promote publication of scientific works,
  - Elsevier: Speech communication, Computer Speech and Language
  - ISCA Archive
- to promote the exchange of scientific views
  - Grants: Support students and young scientists (age  $\leq$  35) to participate in workshops and conferences organized or supported by ISCA.
  - ISCA Distinguished Lecturers. For 2014: Prof. R. Moore (UK), Prof. C. Best (Australia)
- to investigate industrial applications of research results

# ISCA: OBJECTIVES

- to stimulate scientific research and education
- to organize conferences, courses and workshops,
  - Conferences: Interspeech Singapore 2014, Dresden 2015, San-Francisco 2016
  - Courses: Training Schools, Lectures
  - Workshops: ISCA Tutorial and Research Workshops ITRWs (mainly satellites of Interspeech)
- to publish, and to promote publication of scientific works,
  - Elsevier: Speech communication, Computer Speech and Language
  - ISCA Archive
- to promote the exchange of scientific views
  - Grants: Support students and young scientists (age  $\leq$  35) to participate in workshops and conferences organized or supported by ISCA.
  - ISCA Distinguished Lecturers. For 2014: Prof. R. Moore (UK), Prof. C. Best (Australia)
- to investigate industrial applications of research results

# ISCA: OBJECTIVES

- to stimulate scientific research and education
- to organize conferences, courses and workshops,
  - Conferences: Interspeech Singapore 2014, Dresden 2015, San-Francisco 2016
  - Courses: Training Schools, Lectures
  - Workshops: ISCA Tutorial and Research Workshops ITRWs (mainly satellites of Interspeech)
- to publish, and to promote publication of scientific works,
  - Elsevier: Speech communication, Computer Speech and Language
  - ISCA Archive
- to promote the exchange of scientific views
  - Grants: Support students and young scientists (age  $\leq$  35) to participate in workshops and conferences organized or supported by ISCA.
  - ISCA Distinguished Lecturers. For 2014: Prof. R. Moore (UK), Prof. C. Best (Australia)
- to investigate industrial applications of research results

# ISCA: OBJECTIVES

- to stimulate scientific research and education
- to organize conferences, courses and workshops,
  - Conferences: Interspeech Singapore 2014, Dresden 2015, San-Francisco 2016
  - Courses: Training Schools, Lectures
  - Workshops: ISCA Tutorial and Research Workshops ITRWs (mainly satellites of Interspeech)
- to publish, and to promote publication of scientific works,
  - Elsevier: Speech communication, Computer Speech and Language
  - ISCA Archive
- to promote the exchange of scientific views
  - Grants: Support students and young scientists (age  $\leq$  35) to participate in workshops and conferences organized or supported by ISCA.
  - ISCA Distinguished Lecturers. For 2014: Prof. R. Moore (UK), Prof. C. Best (Australia)
- to investigate industrial applications of research results

# ISCA: OBJECTIVES

- to stimulate scientific research and education
- to organize conferences, courses and workshops,
  - Conferences: Interspeech Singapore 2014, Dresden 2015, San-Francisco 2016
  - Courses: Training Schools, Lectures
  - Workshops: ISCA Tutorial and Research Workshops ITRWs (mainly satellites of Interspeech)
- to publish, and to promote publication of scientific works,
  - Elsevier: Speech communication, Computer Speech and Language
  - ISCA Archive
- to promote the exchange of scientific views
  - Grants: Support students and young scientists (age  $\leq$  35) to participate in workshops and conferences organized or supported by ISCA.
  - ISCA Distinguished Lecturers. For 2014: Prof. R. Moore (UK), Prof. C. Best (Australia)
- to investigate industrial applications of research results

# ISCA: OBJECTIVES

- to stimulate scientific research and education
- to organize conferences, courses and workshops,
  - Conferences: Interspeech Singapore 2014, Dresden 2015, San-Francisco 2016
  - Courses: Training Schools, Lectures
  - Workshops: ISCA Tutorial and Research Workshops ITRWs (mainly satellites of Interspeech)
- to publish, and to promote publication of scientific works,
  - Elsevier: Speech communication, Computer Speech and Language
  - ISCA Archive
- to promote the exchange of scientific views
  - Grants: Support students and young scientists (age  $\leq$  35) to participate in workshops and conferences organized or supported by ISCA.
  - ISCA Distinguished Lecturers. For 2014: Prof. R. Moore (UK), Prof. C. Best (Australia)
- to investigate industrial applications of research results



# ISCA: OBJECTIVES

- to stimulate scientific research and education
- to organize conferences, courses and workshops,
  - Conferences: Interspeech Singapore 2014, Dresden 2015, San-Francisco 2016
  - Courses: Training Schools, Lectures
  - Workshops: ISCA Tutorial and Research Workshops ITRWs (mainly satellites of Interspeech)
- to publish, and to promote publication of scientific works,
  - Elsevier: Speech communication, Computer Speech and Language
  - ISCA Archive
- to promote the exchange of scientific views
  - Grants: Support students and young scientists (age  $\geq$  35) to participate in workshops and conferences organized or supported by ISCA.
  - ISCA Distinguished Lecturers. For 2014: Prof. R. Moore (UK), Prof. C. Best (Australia)
- to investigate industrial applications of research results

# ISCA: OBJECTIVES

- to stimulate scientific research and education
- to organize conferences, courses and workshops,
  - Conferences: Interspeech Singapore 2014, Dresden 2015, San-Francisco 2016
  - Courses: Training Schools, Lectures
  - Workshops: ISCA Tutorial and Research Workshops ITRWs (mainly satellites of Interspeech)
- to publish, and to promote publication of scientific works,
  - Elsevier: Speech communication, Computer Speech and Language
  - ISCA Archive
- to promote the exchange of scientific views
  - Grants: Support students and young scientists (age  $\leq$  35) to participate in workshops and conferences organized or supported by ISCA.
  - ISCA Distinguished Lecturers. For 2014: Prof. R. Moore (UK), Prof. C. Best (Australia)
- to investigate industrial applications of research results

# ISCA: OBJECTIVES

- to stimulate scientific research and education
- to organize conferences, courses and workshops,
  - Conferences: Interspeech Singapore 2014, Dresden 2015, San-Francisco 2016
  - Courses: Training Schools, Lectures
  - Workshops: ISCA Tutorial and Research Workshops ITRWs (mainly satellites of Interspeech)
- to publish, and to promote publication of scientific works,
  - Elsevier: Speech communication, Computer Speech and Language
  - ISCA Archive
- to promote the exchange of scientific views
  - Grants: Support students and young scientists (age  $\geq$  35) to participate in workshops and conferences organized or supported by ISCA.
  - ISCA Distinguished Lecturers. For 2014: Prof. R. Moore (UK), Prof. C. Best (Australia)

● to investigate industrial applications of research results

# ISCA: OBJECTIVES

- to stimulate scientific research and education
- to organize conferences, courses and workshops,
  - Conferences: Interspeech Singapore 2014, Dresden 2015, San-Francisco 2016
  - Courses: Training Schools, Lectures
  - Workshops: ISCA Tutorial and Research Workshops ITRWs (mainly satellites of Interspeech)
- to publish, and to promote publication of scientific works,
  - Elsevier: Speech communication, Computer Speech and Language
  - ISCA Archive
- to promote the exchange of scientific views
  - Grants: Support students and young scientists (age  $\geq$  35) to participate in workshops and conferences organized or supported by ISCA.
  - ISCA Distinguished Lecturers. For 2014: Prof. R. Moore (UK), Prof. C. Best (Australia)
- to investigate industrial applications of research results

# ISCA: OUTREACH PROGRAMS

- Training
  - ISCA Training Schools
  - ISCA Seminars
- Geographical Outreach: extend the services of ISCA to different parts of the world
- ISCA Industry Liaisons: Many key companies are part of this program, including Toshiba and Google, AT&T, Microsoft, IBM.

# ISCA: OUTREACH PROGRAMS

- Training
  - ISCA Training Schools
  - ISCA Seminars
- Geographical Outreach: extend the services of ISCA to different parts of the world
- ISCA Industry Liaisons: Many key companies are part of this program, including Toshiba and Google, AT&T, Microsoft, IBM.

# ISCA: OUTREACH PROGRAMS

- Training
  - ISCA Training Schools
  - ISCA Seminars
- Geographical Outreach: extend the services of ISCA to different parts of the world
- ISCA Industry Liaisons: Many key companies are part of this program, including Toshiba and Google, AT&T, Microsoft, IBM.

# ISCA: OUTREACH PROGRAMS

- Training
  - ISCA Training Schools
  - ISCA Seminars
- Geographical Outreach: extend the services of ISCA to different parts of the world
- ISCA Industry Liaisons: Many key companies are part of this program, including Toshiba and Google, AT&T, Microsoft, IBM.



# ISCA: OUTREACH PROGRAMS

- Training
  - ISCA Training Schools
  - ISCA Seminars
- Geographical Outreach: extend the services of ISCA to different parts of the world
- ISCA Industry Liaisons: Many key companies are part of this program, including Toshiba and Google, AT&T, Microsoft, IBM.

# INTERESTED IN ISCA?

- **More information:** <http://www.isca-speech.org>
- **Join ISCA:** <http://www.isca-speech.org/iscaweb/index.php/membership>
  - Enjoy reduced fees for INTERSPEECH and ITRWs
  - Enjoy reduced subscription rates for Speech Communication, an ISCA journal
  - Receive electronic monthly newsletter ISCApad
  - Enjoy free access to full papers in the ISCA Archive
  - Become eligible for ISCA conference grants

# INTERESTED IN ISCA?

- **More information:** <http://www.isca-speech.org>
- **Join ISCA:** <http://www.isca-speech.org/iscaweb/index.php/membership>
  - Enjoy reduced fees for INTERSPEECH and ITRWs
  - Enjoy reduced subscription rates for Speech Communication, an ISCA journal
  - Receive electronic monthly newsletter ISCApad
  - Enjoy free access to full papers in the ISCA Archive
  - Become eligible for ISCA conference grants

# INTERESTED IN ISCA?

- **More information:** <http://www.isca-speech.org>
- **Join ISCA:** <http://www.isca-speech.org/iscaweb/index.php/membership>
  - Enjoy reduced fees for INTERSPEECH and ITRWs
  - Enjoy reduced subscription rates for Speech Communication, an ISCA journal
  - Receive electronic monthly newsletter ISCApad
  - Enjoy free access to full papers in the ISCA Archive
  - Become eligible for ISCA conference grants

# INTERESTED IN ISCA?

- **More information:** <http://www.isca-speech.org>
- **Join ISCA:** <http://www.isca-speech.org/iscaweb/index.php/membership>
  - Enjoy reduced fees for INTERSPEECH and ITRWs
  - Enjoy reduced subscription rates for Speech Communication, an ISCA journal
  - Receive electronic monthly newsletter ISCApad
  - Enjoy free access to full papers in the ISCA Archive
  - Become eligible for ISCA conference grants

# INTERESTED IN ISCA?

- **More information:** <http://www.isca-speech.org>
- **Join ISCA:** <http://www.isca-speech.org/iscaweb/index.php/membership>
  - Enjoy reduced fees for INTERSPEECH and ITRWs
  - Enjoy reduced subscription rates for Speech Communication, an ISCA journal
  - Receive electronic monthly newsletter ISCApad
  - Enjoy free access to full papers in the ISCA Archive
  - Become eligible for ISCA conference grants

# INTERESTED IN ISCA?

- More information: <http://www.isca-speech.org>
- Join ISCA: <http://www.isca-speech.org/iscaweb/index.php/membership>
  - Enjoy reduced fees for INTERSPEECH and ITRWs
  - Enjoy reduced subscription rates for Speech Communication, an ISCA journal
  - Receive electronic monthly newsletter ISCApad
  - Enjoy free access to full papers in the ISCA Archive
  - Become eligible for ISCA conference grants

# INTERESTED IN ISCA?

- More information: <http://www.isca-speech.org>
- Join ISCA: <http://www.isca-speech.org/iscaweb/index.php/membership>
  - Enjoy reduced fees for INTERSPEECH and ITRWs
  - Enjoy reduced subscription rates for Speech Communication, an ISCA journal
  - Receive electronic monthly newsletter ISCApad
  - Enjoy free access to full papers in the ISCA Archive
  - Become eligible for ISCA conference grants



# UNIVERSITY OF CRETE

- A young public educational institution committed to excellence in research and teaching: <http://www.en.uoc.gr/>
- Established in 1973, first students in 1978.
- Emblem:



# UNIVERSITY OF CRETE

- 16 Departments in 5 Schools in 2 campuses: Heraklion and Rethymno
  - Heraklion: Sciences & Engineering, and Medicine
  - Rethymno: Philosophy, Education, Social Sciences
- Research oriented institutes
  - the Skinakas Observatory
  - the Natural History Museum
  - the University General Hospital
- Currently, over 16,000 undergraduates and 2500 postgraduate students
- Academic faculty of 514 members

# UNIVERSITY OF CRETE

- 16 Departments in 5 Schools in 2 campuses: Heraklion and Rethymno
  - Heraklion: Sciences & Engineering, and Medicine
  - Rethymno: Philosophy, Education, Social Sciences
- Research oriented institutes
  - the Skinakas Observatory
  - the Natural History Museum
  - the University General Hospital
- Currently, over 16,000 undergraduates and 2500 postgraduate students
- Academic faculty of 514 members

# UNIVERSITY OF CRETE

- 16 Departments in 5 Schools in 2 campuses: Heraklion and Rethymno
  - Heraklion: Sciences & Engineering, and Medicine
  - Rethymno: Philosophy, Education, Social Sciences
- Research oriented institutes
  - the Skinakas Observatory
  - the Natural History Museum
  - the University General Hospital
- Currently, over 16,000 undergraduates and 2500 postgraduate students
- Academic faculty of 514 members

# UNIVERSITY OF CRETE

- 16 Departments in 5 Schools in 2 campuses: Heraklion and Rethymno
  - Heraklion: Sciences & Engineering, and Medicine
  - Rethymno: Philosophy, Education, Social Sciences
- Research oriented institutes
  - the Skinakas Observatory
  - the Natural History Museum
  - the University General Hospital
- Currently, over 16,000 undergraduates and 2500 postgraduate students
- Academic faculty of 514 members

# UNIVERSITY OF CRETE

- 16 Departments in 5 Schools in 2 campuses: Heraklion and Rethymno
  - Heraklion: Sciences & Engineering, and Medicine
  - Rethymno: Philosophy, Education, Social Sciences
- Research oriented institutes
  - the Skinakas Observatory
  - the Natural History Museum
  - the University General Hospital
- Currently, over 16,000 undergraduates and 2500 postgraduate students
- Academic faculty of 514 members

# UNIVERSITY OF CRETE

- 16 Departments in 5 Schools in 2 campuses: Heraklion and Rethymno
  - Heraklion: Sciences & Engineering, and Medicine
  - Rethymno: Philosophy, Education, Social Sciences
- Research oriented institutes
  - the Skinakas Observatory
  - the Natural History Museum
  - the University General Hospital
- Currently, over 16,000 undergraduates and 2500 postgraduate students
- Academic faculty of 514 members

# UNIVERSITY OF CRETE

- 16 Departments in 5 Schools in 2 campuses: Heraklion and Rethymno
  - Heraklion: Sciences & Engineering, and Medicine
  - Rethymno: Philosophy, Education, Social Sciences
- Research oriented institutes
  - the Skinakas Observatory
  - the Natural History Museum
  - the University General Hospital
- Currently, over 16,000 undergraduates and 2500 postgraduate students
- Academic faculty of 514 members



# UNIVERSITY OF CRETE

- 16 Departments in 5 Schools in 2 campuses: Heraklion and Rethymno
  - Heraklion: Sciences & Engineering, and Medicine
  - Rethymno: Philosophy, Education, Social Sciences
- Research oriented institutes
  - the Skinakas Observatory
  - the Natural History Museum
  - the University General Hospital
- Currently, over 16,000 undergraduates and 2500 postgraduate students
- Academic faculty of 514 members

# UNIVERSITY OF CRETE

- 16 Departments in 5 Schools in 2 campuses: Heraklion and Rethymno
  - Heraklion: Sciences & Engineering, and Medicine
  - Rethymno: Philosophy, Education, Social Sciences
- Research oriented institutes
  - the Skinakas Observatory
  - the Natural History Museum
  - the University General Hospital
- Currently, over 16,000 undergraduates and 2500 postgraduate students
- Academic faculty of 514 members

# UNIVERSITY OF CRETE: BENCHMARKING

- CWTS Leiden Ranking for 2014: Highest percentage of high impact publications in Greece
- Ranks 150th among the total 288 European High Education Institutes (HEIs)
- Ranks 5th in Europe for Natural Sciences (Biology, Physics)
- One Hundred Under Fifty: UoC ranked 48th in 2014 among the worlds best young universities under the age of 50

# UNIVERSITY OF CRETE: BENCHMARKING

- CWTS Leiden Ranking for 2014: Highest percentage of high impact publications in Greece
- Ranks 150th among the total 288 European High Education Institutes (HEIs)
- Ranks 5th in Europe for Natural Sciences (Biology, Physics)
- One Hundred Under Fifty: UoC ranked 48th in 2014 among the worlds best young universities under the age of 50

# UNIVERSITY OF CRETE: BENCHMARKING

- CWTS Leiden Ranking for 2014: Highest percentage of high impact publications in Greece
- Ranks 150th among the total 288 European High Education Institutes (HEIs)
- Ranks 5th in Europe for Natural Sciences (Biology, Physics)
- One Hundred Under Fifty: UoC ranked 48th in 2014 among the worlds best young universities under the age of 50

# UNIVERSITY OF CRETE: BENCHMARKING

- CWTS Leiden Ranking for 2014: Highest percentage of high impact publications in Greece
- Ranks 150th among the total 288 European High Education Institutes (HEIs)
- Ranks 5th in Europe for Natural Sciences (Biology, Physics)
- One Hundred Under Fifty: UoC ranked 48th in 2014 among the worlds best young universities under the age of 50

# COMPUTER SCIENCE DEPARTMENT - CSD

- Computer Science Department (Sciences & Engineering School): Started in 1985 <http://www.csd.uoc.gr/en/>
- In many benchmarks CSD of UoC is considered as the best Computer Science department in Greece.
- 22 faculty members (Full, Associate and Assistant Professors)
- About 1200 undergraduate students (4 years degree)
- About 200 graduate students (Master: 2 years degree, PhD 3-5 years degree)
- Exchanges: Erasmus+

# COMPUTER SCIENCE DEPARTMENT - CSD

- Computer Science Department (Sciences & Engineering School): Started in 1985 <http://www.csd.uoc.gr/en/>
- In many benchmarks CSD of UoC is considered as the best Computer Science department in Greece.
- 22 faculty members (Full, Associate and Assistant Professors)
- About 1200 undergraduate students (4 years degree)
- About 200 graduate students (Master: 2 years degree, PhD 3-5 years degree)
- Exchanges: Erasmus+



# COMPUTER SCIENCE DEPARTMENT - CSD

- Computer Science Department (Sciences & Engineering School): Started in 1985 <http://www.csd.uoc.gr/en/>
- In many benchmarks CSD of UoC is considered as the best Computer Science department in Greece.
- 22 faculty members (Full, Associate and Assistant Professors)
- About 1200 undergraduate students (4 years degree)
- About 200 graduate students (Master: 2 years degree, PhD 3-5 years degree)
- Exchanges: Erasmus+

# COMPUTER SCIENCE DEPARTMENT - CSD

- Computer Science Department (Sciences & Engineering School): Started in 1985 <http://www.csd.uoc.gr/en/>
- In many benchmarks CSD of UoC is considered as the best Computer Science department in Greece.
- 22 faculty members (Full, Associate and Assistant Professors)
- About 1200 undergraduate students (4 years degree)
- About 200 graduate students (Master: 2 years degree, PhD 3-5 years degree)
- Exchanges: Erasmus+

# COMPUTER SCIENCE DEPARTMENT - CSD

- Computer Science Department (Sciences & Engineering School): Started in 1985 <http://www.csd.uoc.gr/en/>
- In many benchmarks CSD of UoC is considered as the best Computer Science department in Greece.
- 22 faculty members (Full, Associate and Assistant Professors)
- About 1200 undergraduate students (4 years degree)
- About 200 graduate students (Master: 2 years degree, PhD 3-5 years degree)
- Exchanges: Erasmus+

# COMPUTER SCIENCE DEPARTMENT - CSD

- Computer Science Department (Sciences & Engineering School): Started in 1985 <http://www.csd.uoc.gr/en/>
- In many benchmarks CSD of UoC is considered as the best Computer Science department in Greece.
- 22 faculty members (Full, Associate and Assistant Professors)
- About 1200 undergraduate students (4 years degree)
- About 200 graduate students (Master: 2 years degree, PhD 3-5 years degree)
- Exchanges: Erasmus+

# SPCC 2014

2014 Speech Processing Courses  
in Crete



University of Crete

1<sup>st</sup> SUMMER SCHOOL  
of  
International Speech  
Communication Association  
(ISCA)

4-8 August 2014

**TOSHIBA**  
Leading Innovation >>



Google

# SPCC 2014

- This is the 1st ISCA (Summer) School
- 34 registrations
- 7 Lecturers:
  - Yannis Stylianou: *Speech Modeling and Voice Pathology*
  - Rainer Martin: *Signal Processing for Hearing Aids*
  - Olivier Pietquin & Milica Gasic: *Statistical Spoken Dialogue Systems*
  - Makis Potamianos and Nassos Katsamanis: *Distant Speech Recognition*
  - Masami Akamine: *Industry meets Academics (Toshiba)*
- Technical lectures will be recorded and expected to be distributed via ISCA Video Archives
- 4 Hands-on sessions

# SPCC 2014

- This is the 1st ISCA (Summer) School
- 34 registrations
- 7 Lecturers:
  - Yannis Stylianou: *Speech Modeling and Voice Pathology*
  - Rainer Martin: *Signal Processing for Hearing Aids*
  - Olivier Pietquin & Milica Gasic: *Statistical Spoken Dialogue Systems*
  - Makis Potamianos and Nassos Katsamanis: *Distant Speech Recognition*
  - Masami Akamine: *Industry meets Academics (Toshiba)*
- Technical lectures will be recorded and expected to be distributed via ISCA Video Archives
- 4 Hands-on sessions

# SPCC 2014

- This is the 1st ISCA (Summer) School
- 34 registrations
- 7 Lecturers:
  - Yannis Stylianou: *Speech Modeling and Voice Pathology*
  - Rainer Martin: *Signal Processing for Hearing Aids*
  - Olivier Pietquin & Milica Gasic: *Statistical Spoken Dialogue Systems*
  - Makis Potamianos and Nassos Katsamanis: *Distant Speech Recognition*
  - Masami Akamine: *Industry meets Academics (Toshiba)*
- Technical lectures will be recorded and expected to be distributed via ISCA Video Archives
- 4 Hands-on sessions



# SPCC 2014

- This is the 1st ISCA (Summer) School
- 34 registrations
- 7 Lecturers:
  - Yannis Stylianou: *Speech Modeling and Voice Pathology*
  - Rainer Martin: *Signal Processing for Hearing Aids*
  - Olivier Pietquin & Milica Gasic: *Statistical Spoken Dialogue Systems*
  - Makis Potamianos and Nassos Katsamanis: *Distant Speech Recognition*
  - Masami Akamine: *Industry meets Academics (Toshiba)*
- Technical lectures will be recorded and expected to be distributed via ISCA Video Archives
- 4 Hands-on sessions

# SPCC 2014

- This is the 1st ISCA (Summer) School
- 34 registrations
- 7 Lecturers:
  - Yannis Stylianou: *Speech Modeling and Voice Pathology*
  - Rainer Martin: *Signal Processing for Hearing Aids*
  - Olivier Pietquin & Milica Gasic: *Statistical Spoken Dialogue Systems*
  - Makis Potamianos and Nassos Katsamanis: *Distant Speech Recognition*
  - Masami Akamine: *Industry meets Academics (Toshiba)*
- Technical lectures will be recorded and expected to be distributed via ISCA Video Archives
- 4 Hands-on sessions

# SPCC 2014

- This is the 1st ISCA (Summer) School
- 34 registrations
- 7 Lecturers:
  - Yannis Stylianou: *Speech Modeling and Voice Pathology*
  - Rainer Martin: *Signal Processing for Hearing Aids*
  - Olivier Pietquin & Milica Gasic: *Statistical Spoken Dialogue Systems*
  - Makis Potamianos and Nassos Katsamanis: *Distant Speech Recognition*
  - Masami Akamine: *Industry meets Academics (Toshiba)*
- Technical lectures will be recorded and expected to be distributed via ISCA Video Archives
- 4 Hands-on sessions

# SPCC 2014

- This is the 1st ISCA (Summer) School
- 34 registrations
- 7 Lecturers:
  - Yannis Stylianou: *Speech Modeling and Voice Pathology*
  - Rainer Martin: *Signal Processing for Hearing Aids*
  - Olivier Pietquin & Milica Gasic: *Statistical Spoken Dialogue Systems*
  - Makis Potamianos and Nassos Katsamanis: *Distant Speech Recognition*
  - Masami Akamine: *Industry meets Academics (Toshiba)*
- Technical lectures will be recorded and expected to be distributed via ISCA Video Archives
- 4 Hands-on sessions

# SPCC 2014

- This is the 1st ISCA (Summer) School
- 34 registrations
- 7 Lecturers:
  - Yannis Stylianou: *Speech Modeling and Voice Pathology*
  - Rainer Martin: *Signal Processing for Hearing Aids*
  - Olivier Pietquin & Milica Gasic: *Statistical Spoken Dialogue Systems*
  - Makis Potamianos and Nassos Katsamanis: *Distant Speech Recognition*
  - Masami Akamine: *Industry meets Academics (Toshiba)*
- Technical lectures will be recorded and expected to be distributed via ISCA Video Archives
- 4 Hands-on sessions

# SPCC 2014

- This is the 1st ISCA (Summer) School
- 34 registrations
- 7 Lecturers:
  - Yannis Stylianou: *Speech Modeling and Voice Pathology*
  - Rainer Martin: *Signal Processing for Hearing Aids*
  - Olivier Pietquin & Milica Gasic: *Statistical Spoken Dialogue Systems*
  - Makis Potamianos and Nassos Katsamanis: *Distant Speech Recognition*
  - Masami Akamine: *Industry meets Academics (Toshiba)*
- Technical lectures will be recorded and expected to be distributed via ISCA Video Archives
- 4 Hands-on sessions

# SPCC 2014

- This is the 1st ISCA (Summer) School
- 34 registrations
- 7 Lecturers:
  - Yannis Stylianou: *Speech Modeling and Voice Pathology*
  - Rainer Martin: *Signal Processing for Hearing Aids*
  - Olivier Pietquin & Milica Gasic: *Statistical Spoken Dialogue Systems*
  - Makis Potamianos and Nassos Katsamanis: *Distant Speech Recognition*
  - Masami Akamine: *Industry meets Academics (Toshiba)*
- Technical lectures will be recorded and expected to be distributed via ISCA Video Archives
- 4 Hands-on sessions

# SPCC 2014

## A Big Thank to:

- Maria Koutsogiannaki
- Giorgos Kafentzis
- Anthony Griffin
- Dora Yakoumaki
- Olina Simantiraki
- Sofia Yannikaki
- Miros Apostolakis



# Welcome to Crete

## Welcome to 1st ISCA Summer School

### co-organized with Univ of Crete: SPCC14

The school is also supported by:  
Toshiba and Google

