# CURRICULUM VITAE

## PERSONAL DETAIL

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|---|---|
| Full name | **MẠC Đăng Khoa** |
| Sex | Male |
| Date of birth | Feb 14th, 1982 |
| Place of birth | Hai Duong - Vietnam |
| Nationality | Vietnamese |

**University Lecturer and Researcher**

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## PERSONAL HISTORY

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| **08/2005 - present** | Researcher and lecturer of Speech Communication department, International Research Institute MICA HUST - CNRS/UMI-2954 - GRENOBLE INP |
| **10/2007 – 06/2012** | PhD student at LIG laboratory (Laboratoire Informatique de Grenoble), France and at MICA Institute - HUST, Vietnam (co-supervisor). |
| **10/2005 – 09/2007** | Master student of Information Processing and Communication, Hanoi University of Science and Technology |
| **09/2000 – 06/2005** | Engineer student at Hanoi University of Science and Technology<br>School of Information and Communication Technology<br>Software Engineering Department. |

## EDUCATION AND DEGREES

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| **06/2012** | **Degree of Doctor of Philosophy from Grenoble University, France**<br>Specialty: Signal, Image, Speech and Telecommunications |

(*Signal, Image, Parole, Télécom (SIPT)*).
Subject: Génération de parole expressive dans le cas des langues à tons (*Generation expressive speech in case of tonal languages*).
Thesis in French.

**09/ 2007**    **Degree of Master of Science from Hanoi University of Science and Technology**
Specialty: Information Processing and Communication.
Subject: Modeling the prosody of Vietnamese language for speech synthesis.
Thesis in English.

**06/2005**    **Bachelor of Science from Hanoi University of Science and Technology**.
Subject: "E-learning and an application of SCORM 2004 to the Learning Management System"
Grade: Excellent.

## SCIENTIFIC RESPONSIBILITIES

**08/2013**    Program committee of Interspeech 2013 Satellite Workshop on on Affective Social Speech Signals (WASSS 2013), Grenoble, France (http://wasss-2013.imag.fr)

**11/2012**    Organizing committee of International Conference on Asian Language Processing 2012, (IALP 2012)- Hanoi, Vietnam, Nov 13-15, 2012 (http://www.mica.edu.vn/IALP-2012)

## RESEARCH PROJECTS

**2004-2005**    Participate in research projects at School of Information and Communication Technology, Hanoi University of Science and Technology (2004-2005)
- Analyze the development of library management software for the Department of Software Technology.
- Research on e-learning, e-learning standard, standard SCORM 2004.
- Establish a Learning management system for an e-learning system (BKLAS)

**2005-2007**    Participate in research projects at MICA Institute
- Develop Camera System Controller software for SIAM center room at MICA.
- Research for the development of an e-learning

application on PDA

**2012- 2017**    Participate in research projects at MICA Institute
- PI Languages, Program ANR « Blanc » 2009; Topic: speech processing – under-resourced languages; LIG/Getalp, MICA, LIA (Avignon).
- Robot²Control, KC03-2$^{nd}$ phase, National project on Intelligent Human-Machine Interaction System using Vietnamese voice control in the noisy environment (2012-2014)
- VIVA – VIetnamese Voice Assistance: MICA/HUST' project
- AuCo: Audio Corpora of languages of Vietnam and neighboring countries – MICA project
- DoReMiFa -Données des Recherches linguistiques de Michel Ferlus en Asie du sud-est

**2017 - present**    Project leader of Vietnamese national science and technology project: "*Research and development automatic translation system from Vietnamese text to Muong speech, apply to unwritten minority languages in Vietnam*"


## PUBLICATIONS

1. Tran Thi-Thu-Thuy, Do Thi-Ngoc-Diep, Mac Dang-Khoa, Pham Van-Dong. "***Cross-lingual phoneme recognition for familiar languages: Applying to Vietnamese and Muong languages.***" National conference on Fundamental and Applied IT Research (FAIR 2018), Hanoi, Vietnam, August 2018

2. Pham Van-Dong, Dang-Khoa Mac, Thi-Hai-Ha Vu and Do-Dat Tran. "***Rapid development of text to speech system for unsupported languages using faking input approach: Experiment with Muong.***" The 10nd National conference on Fundamental and Applied IT Research (FAIR 2017), Danang, Vietnam, August 2017

3. Van-Thinh NGUYEN, Thi-Ngoc-Diep DO, Dang-Khoa MAC, Eric CASTELLI. "***Optimizing data transmission on mobile platform for speech translation system***", First Regional Conference on OCR and NLP for ASEAN Languages, Phnom Penh – Cambodia, 2017

4. Hang-Phuong NGUYEN, Dang-Khoa MAC, Eric CASTELLI, Viet-Son NGUYEN. "***Automatic speech segmentation for monosyllabic languages using speech intensity features: experiment on minority languages in Vietnam***", First Regional Conference on OCR and NLP for ASEAN Languages, Phnom Penh – Cambodia, 2017

5. Tien-Thanh NGUYEN, Dang-Khoa MAC, Do-Dat TRAN, Manh-Ha NGUYEN, Eric CASTELLI, Viet-Son NGUYEN. "***Indexing syllable dictionary for non-uniform unit selection speech synthesis: Application on***

*Text-to-speech system on Android devices*", First Regional Conference on OCR and NLP for ASEAN Languages, Phnom Penh – Cambodia, 2017

6. Trung-Kien Dao, Thanh-Hai Tran, Thi-Lan Le, Hai Vu, Viet-Tung Nguyen, Dang-Khoa Mac, Ngoc-Diep Do, Thanh-Thuy Pham. "*Indoor navigation assistance system for visually impaired people using multimodal technologies*," The 14th International Conference on Control, Automation, Robotics and Vision (ICARCV), ISBN: 978-1-5090-4757-4, 11-2016, Phuket, Thailand, DOI: 10.1109/ICARCV.2016.7838771.

7. Viet-Son Nguyen, Trung-Kien Dao, Viet-Tung Nguyen, Do-Dat Tran, Dang-Khoa Mac, Ngoc-Diep Do, Tuan-Ninh Nguyen. "*A domotic solution with vietnamese speech interaction*," Regional Conference on Electrical and Electronics Engineering (RCEEE), 11-2016, Hanoi, Vietnam.

8. MICHAUD Alexis, GUILLAUME Séverine, JACQUES Guillaume, MAC Dang Khoa, JACOBSON Michel, PHAM Thu Ha. "*Contribuer au progrès solidaire des recherches et de la documentation : la Collection Pangloss et la Collection AuCo.*" 31ème Journées d'Études sur la Parole, (JEP 2016), Paris, France, July 2016.

9. Mac, Dang-Khoa, and Do-Dat Tran. "*Modeling Vietnamese Speech Prosody: A Step-by-Step Approach Towards an Expressive Speech Synthesis System.*" In Trends and Applications in Knowledge Discovery and Data Mining, pp. 273-287. Springer International Publishing, 2015

10. Mac, Dang-Khoa, Thi-Lan Nguyen, Alexis Michaud, and Do-Dat Tran. "*Influences of speaker attitudes on glottalized tones: a study of two Vietnamese sentence-final particles.*" The 18th International Congress of Phonetic Sciences (ICPhS 2015), Glasgow, UK. August 2015.

11. Tran, Do-Dat and Dang-Khoa MAC. "*Application of speech technologies for Vietnamese language on smartphone. VIetnamese Voice Assistant system (VIVA).*" Regional Conference on Computer and Information Engineering (RCCIE), Yogyakarta, Indonesia, October 2014. pp 107-111

12. Do, Thi Ngoc Diep, Duy Binh Nguyen, Dang Khoa Mac, and Do Dat Tran. "*Machine Translation Approach for Vietnamese Diacritic Restoration.*" International Conference on Asian Language Processing (IALP 2013), Urumqi, China, August 2013, pp. 103-106.

13. Nguyen, Thi-Lan, Alexis Michaud, Do-Dat Tran, and Dang-Khoa Mac. "*The interplay of intonation and complex lexical tones: how speaker attitudes affect the realization of glottalization on Vietnamese sentence-final particles.*" The 14th Annual Conference of the International Speech Communication Association (Interspeech 2013), Lyon, France, August 2013. pp 3522-3526

14. Mac, Dang-Khoa, Eric Castelli, and Véronique Aubergé. "*Modeling the prosody of Vietnamese attitudes for expressive speech synthesis.*" International workshop on Spoken Language Technologies for Under-

resourced languages (SLTU 2012), Cape Town, South Africa, May 2012, pp. 114-118

15. Mac, Dang-Khoa, Véronique Aubergé, Eric Castelli, and Albert Rilliard. "*Local vs. global prosodic cues: effect of tones on attitudinal prosody in cross-perception of Vietnamese by French.*" The 6th International Conference on Speech Prosody (Speech Prosody 2012), Shanghai, China, May 2012, pp 222-225.

16. Mac, Dang-Khoa, Véronique Aubergé, Eric Castelli, and Albert Rilliard. "*Can the tones (local function) influence the acoustic perception of the Vietnamese attitudes (global function) for French listeners (non tonal)?.*" International Conference on Speech and Corpora (GSCP 2012), Belo Horizonte, Brazil - March 2012.

17. Mac, Dang-Khoa, Eric Castelli, Véronique Aubergé, and Albert Rilliard. "*How vietnamese attitudes can be recognized and confused: Cross-cultural perception and speech prosody analysis.*" International Conference on Asian Language Processing (IALP 2011), Penang, Malaysia, November 2011, pp. 220-223.

18. Mac, Dang-Khoa, Véronique Aubergé, Albert Rilliard, and Eric Castelli. "*Cross-cultural perception of Vietnamese Audio-Visual prosodic attitudes.*" The 5th International Conference on Speech Prosody (Speech Prosody 2010), Chicago, USA, May 2010, pp 356-359.

19. Mac, Dang-Khoa, Véronique Aubergé, Albert Rilliard, and Eric Castelli. "*Vietnamese multimodal social affects: how prosodic attitudes can be recognized and confused.*" The 2nd International workshop on Spoken Language Technologies for Under-resourced languages (SLTU 2010), Penang, Malaysia, May 2010, pp. 24-28.

20. Mac, Dang-Khoa, Véronique Aubergé, Albert Rilliard, and Eric Castelli. "*Perception interculturelle des attitudes audio-visuelles vietnamiennes.*" Journées d'Etude sur la Parole (JEP 2010), Mons, Belgium, 2010.

21. Mac, Dang-Khoa, Véronique Aubergé, Albert Rilliard, and Eric Castelli. "*Audio-visual prosody of social attitudes in Vietnamese: building and evaluating a tones balanced corpus.*" In 10th Annual Conference of the International Speech Communication Association (InterSpeech 2009), Brighton, U.K, September 2009, pp 2263--2266.

22. Do, Thi Ngoc Diep, Dang Khoa Mac and Nguyen Ngoc Bimh. "*Applying SCORM 2004 in development of E-learning system.*" The 2nd National conference on Fundamental and Applied IT Research (FAIR 2005), Ho Chi Minh city, Vietnam, September 2005. (In Vietnamese)

## OTHER INFORMATION

**Skills:**
- Programming language : C, C++, Java, Web programing,

- Speech processing, speech synthesis, speech recognition

**Languages:**
- English, French

**Hobbies:**
- Travelling
- Music, playing guitar
- Swimming, badminton