

Skanda MURALIDHAR

CONTACT INFORMATION	Rue des Finettes 36, Martigny, CH - 1920 <i>LinkedIn: Skanda MURALIDHAR</i>	<i>Telephone: +41 79 235 25 85</i> <i>E-mail: skandashastry@gmail.com</i> <i>Website: Skanda MURALIDHAR</i>
RESEARCH INTERESTS	Audio Processing, Human Computer Interaction, Affective Computing, Machine Learning, Wearable Sensors, Multimodal Data Analysis, Natural Language Processing	
EDUCATION	École Polytechnique Fédérale de Lausanne (EPFL) , Lausanne, Switzerland Doctoral Candidate, Electrical Engineering, Dec 2014 - Dec 2018 <ul style="list-style-type: none">• Thesis: <i>Social Sensing Methods for Analysis of Dyadic Hospitality Encounters</i>• Adviser: Professor Daniel GATICA-PEREZ National University of Singapore , Singapore Master in Computing, Computer Science, Aug 2012 - Nov 2014 <ul style="list-style-type: none">• Thesis: <i>Human Affective State Estimation</i>• Adviser: Professor Mohan KANKANHALLI University Visvesvaraya College Of Engineering , Bangalore, India B.E., Electrical and Electronics Engineering, Sept 2001 - Jun 2005 <ul style="list-style-type: none">• <i>Magna cum Laude</i>, First Class With Distinction• Thesis: <i>Digital Forensics: An Image Processing Approach</i>• Adviser: Professor K. R. Ramakrishnan	
RESEARCH EXPERIENCE	Idiap Research Institute , Martigny, Switzerland Post-Doctoral Researcher Dec 2018 - Present <ul style="list-style-type: none">• Currently, developing an end-to-end video interview platform to investigate effect of nonverbal and verbal feedback on interview performance. Idiap Research Institute , Martigny, Switzerland Research Assistant, Dec 2014 - Dec 2018 <ul style="list-style-type: none">• Investigated human nonverbal behavior at two workplace situations using multiple modalities including visual, audio and text features, captured from ubiquitous and wearable devices.• Developed an automatic, real-time feedback for user's speaking behavior using Google Glass. National University of Singapore , Singapore Graduate Student Researcher Aug 2012 - Jan 2014 <ul style="list-style-type: none">• Investigated real-time human emotion detection using multiple modalities including audio and video.• Explored use of the "Quantified Self" paradigm to classify human affect utilizing wrist-worn wearable device.	
PROFESSIONAL EXPERIENCE	AVK Systems S.A , Lausanne, Switzerland <i>Senior Product Engineer</i> Feb 2011 to July 2012 <ul style="list-style-type: none">• Designed & optimized core modules of the proprietary slow-motion product to work in real-time.• Actively involved in client interactions including demonstrations to FIFA, UEFA and the Swiss broadcaster (SRG/SSR).	

Diginoc Technologies Pvt Ltd, Bangalore, India

Product Engineer + Research Associate

Oct 2007 to Jan 2011

- Led a **four** member team in developing key product modules on time.
- Wrote over 40% of the complete product, currently evaluated at CHF 50 million.
- Analyzed over 2000 football kick sounds and their attributes leading to a patented technology critical to the company's product. This analysis also led to automatic detection and extraction of football kick sounds given a noisy stadium audio.

Infosys Technologies Ltd Electronics City, Bangalore, India

Software Test Engineer

Sept 2005 to Sept 2007

- Developed test cases at various stages of software development life cycle, ensuring delivery of high quality software.

PUBLICATIONS
(SELECTED)

Muralidhar, S., Nguyen, L., & Gatica-Perez, D. (2018, Oct). Words Worth: Verbal Content and Hirability Impressions in YouTube Video Resumes. In *Proc. of the 9th Workshop on Computational Approaches to Subjectivity, Sentiment and Social Media Analysis*

Muralidhar, S., Mast, M. S., & Gatica-Perez, D. (2018). A Tale of Two Interactions: Inferring Performance in Hospitality Encounters from Cross-Situation Social Sensing. In *Proc. of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies*

Muralidhar, S., Siegfried, R., Odobez, J. M., & Gatica-Perez, D. (2018, Nov). Facing Employers and Customers: What Do Gaze and Expressions Tell About Soft Skills?. In *Proc. of the 17th International Conference on Mobile and Ubiquitous Multimedia*.

Muralidhar, S., & Gatica-Perez, D. (2017, Nov). Examining linguistic content and skill impression structure for job interview analytics in hospitality. In *Proc. of the 16th International Conference on Mobile and Ubiquitous Multimedia*

Muralidhar, S., Costa, J. M., Nguyen, L. S., & Gatica-Perez, D. (2016, Dec). Dites-moi: wearable feedback on conversational behavior. In *Proc. of the 15th International Conference on Mobile and Ubiquitous Multimedia*

PATENTS AND
AWARDS

- University Scholarship (Full), 2001–2005.
- Best thesis award - Dept of Electrical and Electronics Engineering, UVCE (2005)
- US patent –9426405 (2010)
 - Title: *System and method of determining the appropriate mixing volume for an event sound corresponding to an impact related event and determining the enhanced event audio*
- Student Travel Grant - 18th ACM Int. Conf. on Multimodal Interaction (2016)

COMPUTER AND
SOFTWARE SKILLS

- Programming:
 - C, C++, R, MATLAB, Python and UNIX shell scripting.
- Multimedia Packages:
 - FFMPEG, OpenCV, WEKA, SDL, OpenGL.
- Deep Learning Frameworks
 - Basic knowledge of TensorFlow, PyTorch

SPORTS AND
OTHER ACTIVITIES

- Represented University (cricket & football) at inter-state championships.
- National level swimmer.
- Martial artist with black belt in Karate.
- Involved in teaching science and mathematics to under privileged school kids.