## Lucio Azzari

Curriculum vitae et studiorum

PERSONAL AND INFO CONTACTS Address: Insinöörinkatu 59 B 56 City: Tampere, 33720, Finland e-mail: lucio.azzari@tut.fi Phone: +358 400 617209

Nationality: Italian
Date of birth: 14/12/1985

Gender: Male

**EDUCATION** 

Master Degree: Electronic Engineering with Master degree in Telecommunications

University: Universita' degli Studi di "Roma Tre", Rome, Italy

Dates: January 2008-May 2010

Title of qualification awarded: Electronic Engineer

Grade average: 27.857/30

Thesis title: 3D Quality Evaluation Systems

Supervisor: Dr. Marco Carli

Thesis grade: 12/12

Major: Telecommunication systems, signal, image and video processing

Bachelor Degree: Electronic Engineering

University: Universita' degli Studi di "Roma Tre", Rome, Italy

Dates: October 2004-December 2007

Thesis title: Tecniche di Potezione di Dati Biometrici (Biometric Data Protection

Techniques)

Supervisor: Dr. Patrizio Campisi

WORK EXPERIENCES

Dates: October 2009 - March 2010, July 2010 - July 2011

Employer: Department of Signal Processing, Tampere University of Technology Job description: Under the supervision of Dr. Atanas Gotchev, I first worked on my thesis project, which dealt with rendering of stereo videos, mainly addressing the problems of occlusion and disocclusions. After graduation, I continued my work within the EU-funded project 'Mobile 3DTV'. I was responsible of the development and testing of occlusion-filling algorithm, with respect to objective and subjective metrics. In particular I have shown the rendered videos to 30 test subjects, monitoring their attention using an eye-tracker and reporting their evaluation about the general quality of the material. Finally, I have also investigated deblocking techniques for stereo-videos. Our work has been finalized with the following publications.

## **Publications:**

"Comparative Analysis of Occlusion-Filling Techniques in Depth Image-Based Rendering for 3D Videos", L. Azzari, A. Gotchev and F. Battisti, Proc. ACM MoViD 2010.

"A modified non-local mean inpainting technique for occlusion filling in depth-image-based rendering", L. Azzari, A. Gotchev, F. Battisti, M. Carli and K. Egiazarian, Proc. SPIE 2011.

"Deblocking of mobile stereo video", A. Gotchev, L. Azzari, K. Egiazarian, Proc. SPIE 2012.

Dates: September 2011 - December 2011

Employer: Tampere University of Technology and Nokia Research Center

Job description: I have worked on a joint project between Tampere University of Technology and Nokia Research Center, under the supervision of Prof. Moncef Gabbouj, Department of Signal Processing, and Dr. Igor Curcio, Research Leader on Future Media Solutions in Nokia Research Center.

Dates: From January 2012

**Employer:** Tampere University of Technology

**Job description:** Currently I am doing my PhD studies under the supervision of Dr. Alessandro Foi and prof. Karen Egiazarian in the Department of Signal Processing

in the Tampere University of Technology.

## SKILLS AND N

Mother tongue: Italian

COMPETENCES Other language: English, B1 level according with the *European self-assesment*. Since October 2009, my first arrival in Finland, I have been working and studying using English as the main language. My English writing skills were perfected by writing my Master Thesis, scientific publications, reports.

**Technical skills:** In general I have good experience with signals, signal transforms and other processing methods. I have also good knowledge about telecommunications and transmission systems: in particular on electromagnetic fields, antennas, data coding, information theory, transmissions with optical fibres, internet fundamentals and multimedia communication.

I have extensive expertise about H.264 and MPEG4 video compression, and MPEG layer 3 audio compression. During my work on 3D video processing, I have gathered experience on stereo video and Video+Depth compression, Depth-Map Image Based Rendering (DIBR) and post-processing.

**Social skills:** Having worked two years within a university research project, I have learned to work both independently and in a team, considering the others' opinions and proposing my ideas in a moderate way, respecting others' personalities.

Computer skills: I have solid experience in Matlab programming, which I have used extensively for my thesis and for my research work. I have also a background of C, especially at developing MEX files for Matlab.

**HOBBIES** 

I have played soccer until I went to University when I was 18, and now I enjoy playing sometimes with my friends, and more often watching it in pubs. I like also to relax with friends playing table games.