

## Sofiane Yous

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### CONTACT INFORMATION

Image Processing Laboratory  
Graduate School of Information Science  
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### PERSONAL INFORMATION

Date of birth: 04 October, 1973.  
Place of birth: Medea, Algeria.  
Citizenship: Algeria.  
Marital status: Married.

### RESEARCH INTERESTS

Computer Vision, Image Processing, Computer Graphics, Visual surveillance, People tracking, free-viewpoint video, 3D reconstruction and rendering, Image-based rendering, GPU-based acceleration for computer vision applications (GPGPU), Gaze-based Interfaces.

### EDUCATION

**Nara Institute of Science and Technology**, Ikoma, Nara, JAPAN

PhD, Information Science, March 2007.

- Dissertation Topic: “Active Camera Control for High-Resolution Imaging”
- Advisor: Prof. Masatsugu Kidode

**Institut National d’Informatique**, Oued-Smar, Algiers, ALGERIA

Master in Computer Science, March, 2004

- Dissertation Topic: “3D Gaze Position Estimation”
- Advisor: Prof. Masatsugu Kidode (NAIST-Japan), Prof. Redouane Toumi (USTHB-Algeria)

**Osaka University of Foreign Studies**, Minoh, Osaka, JAPAN

Certificate of Completion, Japanese Language, September, 2003.

**Institut National d’Informatique**, Oued Smar, Algiers, ALGERIA

Engineer in Computer Science, October, 1997

- Dissertation Topic: “Scenery Images Restoration and Contours Completion”
- Advisor: Dr. Achour Karim (CDTA-Algeria)

### HONORS AND AWARDS

Professor Hide Tokuda’s Special Prize for NAIST-COE young researchers, March 2006.

NAIST-COE Grant Award for young researchers

Title:”A System for Face Tracking in Crowded Areas”

Investigator: **Sofiane Yous**, Hamid Laga, Abdelaziz Khat.

Amount: 300 000 Yen

Term: September, 2006 - March, 2007.

NAIST-COE Grant Award for young researchers

Title: "Support System for Visual Monitoring of Public Spaces with a Sparsely Distributed Camera Network"

Investigator: **Sofiane Yous**, Abdelaziz Khiat.

Amount: 200 000 Yen

Term: November, 2005 - March, 2006.

NAIST-COE Promoted Researcher Fellowship, May 2005-March 2007.

Japan Ministry of Education, Culture, Sports, Science and Technology Scholarship recipient, April 2003 - March 2007.

SELECTED  
PUBLICATIONS

**Sofiane Yous**, Hamid Laga, Masatsugu Kidode, Kunihiro Chihara: "GPU-Based Shape from Silhouettes", In the Proceedings 5th International Conference on Computer Graphics and Interactive Techniques (GRAPHITE 2007), Perth, Western Australia, pp. 71-78, December 2007.

**Sofiane Yous**, Norimichi Ukita, and Masatsugu Kidode: "An Assignment Scheme to Control Multiple Pan/Tilt Cameras for 3D Video", Journal of Multimedia, Vol.2, Issue 1, pp.10-19, 2007.

**Sofiane Yous**, Masatsugu Kidode: "A Fast Surface-Based Visual Hull Reconstruction", IAPR Conference on Machine Vision Applications (MVA 2007), pp. 477-482 Tokyo, Japan

**Sofiane Yous**, Abdelaziz Khiat, Masatsugu Kidode, Tsukasa Ogasawara, "Networked Heterogeneous Camera System for High Resolution Face Images", in the Proceedings of 2nd International Symposium on Visual Computing (ISVC'06), Lake Tahoe, NV, USA, Lecture Notes on Computer Science (LNCS) Vol. 4292, pp.88-97, Springer, 2006.

Abdelaziz Khiat, **Sofiane Yous**, Tsukasa Ogasawara, Masatsugu Kidode: "Combining Fixed Stereo and Active Binocular Cameras into a Platform for Security Applications", In Proceedings of the 2006 IEEE International Conference on ROBOTICS and BIOMIMETICS, Kunming, China, December 17-20, 2006.

**Sofiane Yous**, Norimichi Ukita, Masatsugu Kidode: "Multiple Active Camera Assignment for High Fidelity 3D Video", In Proceedings of the 4th IEEE International Conference on Computer Vision Systems (ICVS'06), New-York, USA, Jan. 2006.

**Sofiane Yous**, Norimichi Ukita, Masatsugu Kidode: "Epipolar sweeping and color-shape consistency criterion for Dense 3d reconstruction and occlusion detection", Image Recognition and Understanding Symposium (MIRU2005), pp.1247-1254, Awaji, Japan, July 2005

**Sofiane Yous**, Norimichi Ukita, Masatsugu Kidode: "Toward a High Fidelity 3D Video: Multiple Active Camera Control Assignment", Information Processing Society of Japan, Computer Vision and Image Media, No.2005-CVIM-152, Vol.2005, pp.85-92, Osaka, Japan, Jan. 2006.

INVITED TALKS

Hamid Laga and **Sofiane Yous**: "3D vision systems in Robotics", SAE-UDEM Engineering Conference 2007", Vision and Applications, Monterey university - Mexico October 23-26, 2007. (link :<http://www.saeudem.com/index2.html>)

PROFESSIONAL  
EXPERIENCE

**Nara Institute of Science and Technology**, Ikoma, Nara, JAPAN

*Researcher*

**April 2007 - Present**

- Visual Surveillance and Monitoring of public spaces based on Heterogeneous, sparsely-distributed camera system.

- Free-Viewpoint Video and TV.

**Nara Institute of Science and Technology**, Ikoma, Nara, JAPAN

*NAIST-COE promoted researcher*

**May 2005 - March 2007**

- Research on Computer Vision systems for visual surveillance.

**Tresorerie de la Wilaya de Medea (Finance Ministry)**, Medea, ALGERIA

*System Engineer*

**July 2000 - March 2003**

- System administration, personal training, ...

**Algerian Defense Army, Airborne forces School**, Biskra ALGERIA

*System Engineer*

**April 1999 - March 2000**

- System administration, teaching Computer Science, ...

**Centre de Dveloppement des technologies avances**, El-Madania, Algiers, ALGERIA

*Student intern (internship)*

**Robotics Lab, September 1996 - October 1997**

- Scenery Image Restoration and Contours Completion.

NATIONAL SERVICE  
(MILITARY)

- Service type: Algerian Defense Army, Airborne forces.
- Period: October 1998 - March 2000.
- Rank: Aspirant (Officer Designate).
- Current Status: Completed.

COMPUTER SKILLS

- Languages: C/C++, CG and GLSL(C-Like and GL Shading Languages for GPU programming), Lisp, Pascal, etc.
- Libraries and Tools: OpenGL, OpenCV, LATEX, common office software.
- Operating Systems: Linux(Mandrake, Vine, Redhat, FedoraCore), Windows.
- Other: GPU and GPGPU (General Purpose GPU) programming.

LANGUAGE SKILLS

- Arabic: Native.
- French: Native level.
- English: Excellent command.
- Japanese: Basic Level.

OTHER

- Member of IEEE Computer Society.