### **HUONG-GIANG DOAN**

### PhD CANDIDATE IN COMPUTER VISION DEPARTMENT,

# INTERNATIONAL RESEARCH INSTITUTE MICA, HANOI UNIV. OF SCIENCE AND TECH.

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#### PERSONAL INFORMATION

Name: Huong-Giang Doan Gender: Female Date of birth: May 22, 1980

Nationality: Vietnamese Marital status: Married Email: <a href="mailto:huonggiang.doan@mica.edu.vn">huonggiang.doan@mica.edu.vn</a>

## **EDUCATION**

- 2013-2017: Ph.D. candidate in Automatic Control System HUST
- 2004-2006: Master in Instrumentation and Automatic Control System HUST
- 1998-2003: Bachelor of Engineer in Instrumentation and Industrial Informatics HUST

#### RESEARCH EXPERIENCES

• 2013-2017: Ph.D. Candidate, HUST, Hanoi, Vietnam

Ph.D. title: Dynamic hand gesture recognition using RGB-D images for Human Machine Interaction

• **2016-Present: Main participant** in R&D Project funded by Hanoi University of Science and Technology, Project title: *Controlling home appliances using multimodal technologies (hand gestures, voice, mobile phone)* 

• 2013-2014: Main participant in R&D Project funded by Hanoi University of Science and Technology Project title: Dynamic hand gesture recognition using Kinect sensor, application in controlling home appliances

• **2008-2009**: **Main participant** in R&D Project funded by Vietnamese Ministry of Industry and Trade Project title: *Research*, *design*, *and development of an industrial X-ray source controlling system* 

• **2007-2008**: **Main participant** in R&D Project funded by Vietnamese Ministry of Industry and Trade Project title: *Research*, *design*, *and development of a rice sorting system using IR camera* 

### WORKING EXPERIENCES

- 2009-2013: Teaching in VNU University of Engineering and Technology (Sensors, Mechatronic System), Hanoi, Vietnam
- 2007-2012: Development of image processing and control programs for industrial systems, Industrial Machinery and Instruments Holding (IMIHolding), Science and Technology Enterprise in Mechatronic Field, Hanoi, Vietnam
- 2005-2006: Deployment of industrial management systems (concrete mixing plant, vehicle scales, and train scale), IMIHolding
- 2003-2004: Design and production of batcher circuit using 8051 and FIC family microcontroller, IMIHolding

# **SKILLS**

- Programming languages: Pascal, C/C++, C#, Matlab, Visual Basic, Visual C++
- Database: Access, SQL, MySQL
- Operating Systems: Microsoft Windows, Linux
- Programming Libraries: OpenCV, OpenGL, PCL
- Languages: Vietnamese (Native); English (Fluent)

# PARTICIPATING IN CONFERENCES AND SUMMER SCHOOLS

- Conferences: FAIR, Thainguyen, Vietnam (Jul. 2014); FAIR, Hanoi, Vietnam (Jul. 2015); SoICT Hue, Vietnam (Dec. 2015), CIS-RAM, Cambodia (Jul. 2015); RIVF, Hanoi, Vietnam (Oct. 2016)
- Summer schools: Machine Learning and Statistics, VNUA, Hanoi, Vietnam (Jun. 2015); Statistics and probability distribution, MICA, HUST (Jul. 2015); Open Lectures on Machine Learning and Pattern Recognition, VNUA, Hanoi, Vietnam (Apr. 2016)

# RESEARCH DISSEMINATION

- Demonstrations in 2015, 2016 Exhibition on Int. Sci. and Industrial Equipment (Techmar), Hanoi, Vietnam: A Lamp and Fan
  controlling by hand gestures using the Kinect sensor (300 Audiences)
- Seminars and Exhibitions on scientific and technological achievements of HUST, Hanoi, Vietnam, Sept. 2016
- Demonstration in AURA Workshop, Hanoi, Vietnam, Nov. 2016

# SIGNIFICANT PUBLICATIONS

- [1] H.-G. Doan, V.-T. Nguyen, H. Vu, and T.-H. Tran, "A combination of user-guide scheme and kernel descriptor on rgb-d data for robust and realtime hand posture recognition" Eng. Appl. Artif. Intell., vol. 49, pp. 103–113, Mar. 2016
- [2] H.-G. Doan, H. Vu, and T.-H. Tran, "Phase Synchronization in a Manifold Space for Recognizing Dynamic Hand Gestures from Periodic Image Sequence" in Proc. of the 12th IEEE RIVF Int. Conf. on Comp. and Com. Tech., Vietnam, Nov. 7-9, 2016 (13/96 Long paper accepted)
- [3] H.-G. Doan, H. Vu, and T.-H. Tran, "Are cyclical hand gestures better than non-cyclical pattern ones", International Conference on MVA2017, Nagoya, Japan, May 8-12, 2017 (accepted).

Full list of publications: http://www.mica.edu.vn/perso/Doan-Thi-Huong-Giang/