NGUYEN DONG HAI PHUONG

Robotics Researcher – PhD Fellow

Personal Information

Date of Birth:	May, 17th 1987
Place of Birth:	Da Nang city, Vietnam
Gender:	Male
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Research Interests

Spatial perception and sensorimotor competences development in humanoid robotics.
Machine Learning application on Robots.
Control and Motion Planning.
Embedded Systems.

Education

Jan 2016 – present	PhD Fellow in Bioengineering and Robotics	iCub Facility, Istituto Italiano di Tecnologia, Genova, Italy
Sep 2014 – Jul 2015	Master 2 of Advanced Robotics	Università degli Studi di Genova, Genova, Italy http://goo.gl/c0qI5L
Sep 2013 – Jul 2014	Master 1 of Advanced Robotics	Ecole Centrale de Nantes, Nantes, France http://goo.gl/BuJEup http://goo.gl/uX50yE
Sep 2005-Jul 2010	Bachelor of Electrical Engineering	Da Nang University of Technology, Da Nang, Vietnam.

Academic Projects

2016 – present	SECURE European project (http://secure-robots.eu)
2016	WYSIWY European project (http://wysiwyd.ufp.edu)
2015	Real-time Path Generation and Control with obstacles avoidance of Multicopters - Toward Autonomous Aerial Vehicles for Search and Rescue
2014	Monitoring and controlling Baxter robot with Oculus Drift.
2014	Developing ROS (Robot Operating System) stack and localization ability for Khepera III mobile robot (K-team).

Professional Experience

Jan 2016 - present	Robotics Researcher at iCub Facility, Istituto Italiano di Tecnologia, Italy.
Sep 2015 - Dec 2015	Collaborative Researcher at DIBRIS, Università degli Studi di Genova, Italy.
Feb 2015 - Sep 2015	Research student at Laboratorium lab, DIST, Università degli Studi di Genova, Italy.
Nov 2010 - Jan 2016	Lecturer at Faculty of Electrical Engineering, Da Nang University of Science and Technology, Vietnam.
Nov - Dec 2009	Intern at Van Thanh Medical Instruments Company, Da Nang, Vietnam.
Jul - Aug 2009	Intern at Pleikrong Hydropower Plant, Kontum city, Vietnam.

Scholarships & Awards

2016 – present	Marie Curie Early Stage Researcher Fellowship	European Commission
2013 – 2015	Eramus Mundus Scholarship	EMARO program
2010	Good Grade Graduation of Course 2005-2010 Award	Da Nang University of Technology, Vietnam
2009	Shinco Technos Scholarship for Excellent Students of Da Nang University of Technology	Shinko Technos Co. Ltd
2008	Odon Vallet Scholarship for Excellent Students	Rencontres Du Vietnam
2007	Odon Vallet Scholarship for Excellent Students	Rencontres Du Vietnam

Publications

1. P. D. Nguyen, M. Hoffmann, U. Pattacini, and G. Metta, "A fast heuristic Cartesian space motion planning algorithm for many-DoF robotic manipulators in dynamic environments," presented at the Humanoid Robots (Humanoids), 2016 IEEE-RAS 16th International Conference on, 2016, pp. 884–891.
2. P. D. Nguyen, C. T. Recchiuto, and A. Sgorbissa, "Real-Time Path Generation and Obstacle Avoidance for Multirotors: A Novel Approach," Journal of Intelligent & Robotic Systems, pp. 1–23, 2017.
3. P. D. Nguyen, C. T. Recchiuto, and A. Sgorbissa, "Real-time path generation for multicopters in environments with obstacles," presented at the Intelligent Robots and Systems (IROS), 2016 IEEE/RSJ International Conference on, 2016, pp. 1582–1588.

Technical Skills

Programming language:

- C/C++, Assembly: skilled user
  - ROS C++ (Robot Operating System), OpenCV C++, YARP.
- Python: good user.
- Visual Basic: good user.
- Ladder, STL: good user (S7 Family of Siemens)

Simulation:

- Matlab & Simulink: proficient user
  - Power Electronic and Electric Machines, Automatic Control System, Robot Manipulator, Mobile Robot, System Identification and Digital Signal Processing.

Robots:

- Mobile robots: Khepera III (K-team), Firefly (Asctec), Mindstorms (LEGO)
- Manufacturing robots: Puma, Baxter (Rethink Robotics)
- Humanoid robots: iCub (IIT), Reem-C (Pal Robotics)

MPU/MCU:

- Microchip PIC16, PIC18 & dsPIC, Cypress PSoC: expert user.
- Intel 8086 MPU Family: good user.
- Atmel 8051 MCU Family: good user.
- TI Fixed- Point Digital Signal Processor Family, Stellaris Family: basic user.

Language Skills

Vietnamese:	mother-tongue
English:	IELTS 6.5 (June 2012)
French:	Beginner
Italian:	Beginner

Extra-Curricular Activities

Mar 2007	Liaison Officer in EWEC Meeting 2007 held in Da Nang city, Vietnam.

Oct 2006	Liaison Officer in APEC Tourism Ministerial Meeting held in Hoi An city, Quang Nam province, Vietnam.
Sep 2006	Staff Volunteer in 16th APEC SOM III held in Da Nang city, Vietnam.

References

1. Professor Giorgio Metta (PhD supervisor)
   iCub Facility, Istituto Italiano di Tecnologia, Genova, Italy
   Email: giorgio.metta@iit.it
2. Ugo Pattacini, PhD (PhD supervisor)
   iCub Facility, Istituto Italiano di Tecnologia, Genova, Italy
   Email: ugo.pattacini@iit.it
3. Professor Antonio Sgorbissa (Master thesis supervisor),
   Laboratorium lab, DIST, Università degli Studi di Genova, Genova, Italy
   Email: antonio.sgorbissa@unige.it
4. Professor Wisama Khalil,
   Robotics group, IRCCyN, Ecole Centrale de Nantes, Nantes, France
   Email: wisama.khalil@irccyn.ec-nantes.fr
5. Professor Garcia Gaetan,
   Robotics group, IRCCyN, Ecole Centrale de Nantes, Nantes, France
   Email: gaetan.garcia@ec-nantes.fr
6. Dr. Nguyen Anh Duy,
   Vice Rector, Da Nang College of Technology, University of Da Nang, Da Nang city, Vietnam
   Email: naduy2000@gmail.com; naduy@dct.udn.vn