

# NHAN H. PHAM

nhanph@live.unc.edu

## EDUCATION

- 2017-present **PhD in Operations Research**  
University of North Carolina at Chapel Hill (UNC) · Chapel Hill, NC
- 2015-2017 **Graduate Study in Computer Engineering**  
University of Nevada, Reno (UNR) · Reno, NV
- 2008-2013 **Bachelor of Engineering, Computer Engineering – Honor Program**  
Bach Khoa University – Vietnam National University (BKU) · Ho Chi Minh City, Vietnam

## EXPERIENCES

- 2018-present **Graduate Teaching Assistant**
  - **STOR 113: Decision Models for Business and Econ. (Prof. Gabor Pataki) · Spring 2018**Department of Statistics and Operations Research  
University of North Carolina at Chapel Hill · Chapel Hill, NC
- 2017-2018 **Graduate Teaching Assistant**
  - **STOR 113: Decision Models for Business and Economics (Prof. Nilay Argon) · Fall 2017**Department of Statistics and Operations Research  
University of North Carolina at Chapel Hill · Chapel Hill, NC
- 2015-2017 **Graduate Teaching Assistant**
  - **CPE 301: Embedded Systems Design (Prof. Dwight Egbert) · Fall 2016, Spring 2017**
  - **CS 302: Data Structures (Prof. Michael Leverington) · Fall 2015, Spring 2016**Department of Computer Science & Engineering  
University of Nevada, Reno · Reno, NV
- 2013-2015 **Lab Assistant · Renesas SuperH Lab**  
Department of Computer Science & Engineering  
Bach Khoa University – Vietnam National University · Ho Chi Minh City, Vietnam
- 2012 **Embedded Software Engineering Intern**  
Applied Micro Circuits Corporation · Ho Chi Minh City, Vietnam

## PUBLICATIONS

- 2016 **N. H. Pham** and H. M. La. Design and Implementation of an Autonomous Robot for Steel Bridge Inspection. In Proceedings of the **54th Annual Allerton Conference on Communication, Control, and Computing**, pages 1-8, Sept. 27-30, 2016, Urbana-Champaign, Illinois, USA.
- N. H. Pham**, H. M. La, Q. P. Ha, S. N. Dang, A. H. Vo and Q. H. Dinh, "Visual and 3D Mapping for Steel Bridge Inspection Using a Climbing Robot," **The 33rd International Symposium on Automation and Robotics in Construction and Mining (ISARC)**, pages 1-8, July 18-21, 2016, Auburn, Alabama, USA.
- 2013 The-Duy Phan Dinh, **Nhan H. Pham**, Khoi-Nguyen Le-Huu and Anh-Vu Dinh Duc, "Quadrotor Helicopter: A Practical Design Approach," **IEICE International Conference on Integrated Circuits, Design and Verification**, pp.156-163, 2013, Ho Chi Minh, Vietnam.

## RESEARCH PROJECTS

- 2015-2017 **Building a Steel Climbing Robot for Steel Bridges Inspection**  
Joint worked with Dr. Hung La, UNR, Luan V. Nguyen, UNR, Tuan-Dung Le, UNR and Jesus Sanchez, UNR.

- 2015 **NSF Innovation Corps (I-Corps™) Program**  
*Joint worked with Dr. Hung La (Principle Investigator – PI), UNR, Mr. Edward Little (Industrial Mentor – IM), FiberMatrix Inc.*
- 2013-2015 **Building a Quadrotor helicopter with Fully Automatic Controlled**  
*Joint worked with Dr. Vu A. D. Dinh, University of Information Technology – VNU HCM (UIT – VNU HCM) and Duy T. D. Phan, BKU.*
- 2013 **Building a Service Calling System**  
*Joint worked with Duy T. D. Phan, BKU, and Bach X. D. Nguyen, BKU.*

**SKILLS & QUALIFICATIONS****Programming Languages**

C/C++, Python, Matlab, AMPL, R

**Robotics**

Robot Operating System (ROS), OpenCV, PointCloud

**Skills**

Comfortable programming in Linux environment

Robotics: hardware development, sensor integration (mono/stereo camera, IR, Sonar, Laser), SLAM, 3D Mapping

PCB design, soldering, circuit analysis and debugging

Machine shop skills: milling, drilling

**HONORS & AWARDS**

- 2016-2017 **Graduate Access Grant · Regents' Higher Education Opportunity Award**  
University of Nevada, Reno · Reno, NV
- International Graduate Student Award · Regents' Higher Education Opportunity Award**  
University of Nevada, Reno · Reno, NV
- 2016 **Poster Exhibition – First Place Winner**  
CSE Graduate Club – Department of Computer Science & Engineering  
University of Nevada, Reno · Reno, NV
- 2008-2013 **Outstanding Academic Student Scholarship**  
Department of Computer Science & Engineering  
Bach Khoa University – Vietnam National University · Ho Chi Minh City, Vietnam
- 2012 **Sunflower Mission Electronic & Telecom Scholarship**  
eSilicon Vietnam · Ho Chi Minh City, Vietnam

**OTHER EXPERIENCES**

- 2017 **2017 Nevada State Science Olympiad Judge**  
University of Nevada, Reno · Reno, NV
- 2014 **Organizing Assistant**  
BKIT Car Rally · Ho Chi Minh City, Vietnam
- 2013 **Robot Control Software Developer**  
BK4 and BKIT Number One Team · Vietnam National Robot Contest
- 2012 **Embedded Software Developer**  
ChipFC Team · Texas Instruments National MCU Design Contest · 1st Place