

Vuong V. Trinh

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<http://trinhvv.github.io>

EXPERIENCE	Doctoral Candidate , Commissariat à l'énergie atomique et aux énergies alternatives 2014–2017 Supervised by Mazen Alamir and Patrick Bonnay on cryogenics, funded by CRYOGREEN <ul style="list-style-type: none">Develop constrained explicit nonlinear control schemes using robust regression and kernel methodsDevelop constrained hierarchical distributed control schemes based on numerical optimization (derivative free and bundle methods) leveraging fixed-point iterations Research Intern , Grenoble Images Parole Signal Automatique laboratoire Jan–Jun 2014 Supervised by Ioan D. Landau and Luc Dugard on active vibration control <ul style="list-style-type: none">Develop reduced-order feedforward and feedback active vibration control schemes leveraging system identification, Youla-Kucera parametrization and \mathcal{H}_∞ control synthesis with experimental validationLaboratory instructor and poster presenter for the adaptive control course at EECI IGSC 2016
EDUCATION	Ph.D. Control & Optimization , Communauté Université Grenoble Alpes (exp.) 2018 M.S. Automation & Control , Université Joseph Fourier & Institut Polytechnique de Grenoble 2014 B.S. Automation & Control (ELITECH) , Hanoi University of Science and Technology 2012
SERVICES	Adjunct Researcher , Dong A University Research Institute since 2017 <ul style="list-style-type: none">Collaborate with Phuc K. Tran, Tuan A. Mai and Huong T. Truong on anomaly detectionCollaborate with Hyeong Joon Ahn and Canh D. Nguyen on motion control of linear motors Organization Team , Junior Scientist and Industry annual meeting Mar 2016
AWARDS	Excellence master fellowship , PERSYVAL-Lab 2013 Vallet scholarship , Rencontres du Vietnam 2008 Double prize in physics (1st) and maths (cons) , Vietnam Mathematics & Youth Magazine 2005
VALORISATION	MOOC HarvardX CS50 , edX (verified cert.) Feb 2018 Project-based Research Week , SEMIE Oct 2016
COMPETENCES	Languages Vietnamese (<i>native</i>), English (<i>limited working proficiency</i> , IELTS 6.5), French (<i>basic</i>) Techniques Matlab, C/C++, Python, CPLEX, git, heroku, \LaTeX , Inkscape, Siemens S7, STM32
PUBLICATIONS	[1] M. Alamir, P. Bonnay, F. Bonne and V. V. Trinh. Fixed-point based hierarchical MPC control design for a cryogenic refrigerator. <i>Journal of Process Control</i> , 58:117–130, 2017. doi: 10.1016/j.jprocont.2017.09.006 [2] V. V. Trinh, M. Alamir, P. Bonnay and F. Bonne. Explicit model predictive control via nonlinear piecewise approximations. In: <i>Proc. 10th IFAC Symposium on Nonlinear Control Systems</i> , Monterey, CA, USA, 2016. doi: 10.1016/j.ifacol.2016.10.173 [3] M. Alamir, V. V. Trinh and P. Bonnay. On the stabilization of fixed-point iterations arising in hierarchical control design. In: <i>Proc. 20th IFAC World Congress</i> , Toulouse, France, 2017. doi: 10.1016/j.ifacol.2017.08.1363