

Vuong V. Trinh

vuongtv@donga.edu.vn
<https://vuongvtrinh.github.io>

EXPERIENCE	Research Scientist, Dong A University Research Institute	since Jan 2019
	<ul style="list-style-type: none">Develop kernel-based anomaly detection algorithms with application to wireless sensor networks.	
	Software Engineer, Benjamin Muyl Design S.A.	Sep–Dec 2018
	<ul style="list-style-type: none">Develop scientific software for computation and optimization of sailing yachts via symbolic framework,Familiar with Python, CasADi, bash, version control and unit-testing.	
	Research Engineer, Commissariat à l'Énergie Atomique et aux Énergies Alternatives	2014–2017
EDUCATION	Supervisors: M. Mazen Alamir and M. Patrick Bonnay, funded by the project ANR CryoGreen.	
	<ul style="list-style-type: none">Develop explicit constrained control via nonlinear regression and reduced-set support vector machines,Develop hierarchical control coordination via derivative-free optimization and fixed-point iterations,Familiar with Matlab, C, LaTeX and Inkscape, cryogenic processes with PLC, SCADA and Modbus.	
	Research Intern, Grenoble Images Parole Signal Automatique Laboratoire	Jan–May 2014
	Supervisors: M. Ioan D. Landau and M. Luc Dugard, on robust active vibration control.	
	<ul style="list-style-type: none">Perform system identification, robust control design and experiments using Matlab and xPC Target,Laboratory instructor for the adaptive control course at EECI IGSC'14.	
	Industrial Intern, Yazaki Haiphong Vietnam	Apr 2011
AWARDS	<ul style="list-style-type: none">Analyse customer specifications, present technical solution, train operators, deliver bill-of-materials,Design, set up and program PLC / HMI / inverter using AutoCAD, Step7 and WinCC.	
	M.S. Automation & Control, Université Joseph Fourier & Institut Polytechnique de Grenoble	2014
	Mention: good GPA: 15/20	
	B.S. Automation & Control, Hanoi University of Science and Technology	2012
	Mention: good (<i>Talented Engineer's Program</i>) GPA: 3.17/4.00	
VALORISATION	Excellence Master Fellowship, LabEx PERSYVAL-Lab	2013
	Vallet Scholarship for excellent academic performance, Rencontres du Vietnam	2008
	CS50's Introduction to Computer Science Course Certification, Harvard University via edX	
LANGUAGES	Six Sigma and Lean Processional Program Certification, Technische Universität München via edX	
	TUM Lean Six Sigma Yellow Belt Certification, Technische Universität München	
	Vietnamese (<i>native</i>) English (<i>fluent</i> : IELTS 6.5) French (<i>basic</i>)	
VOLUNTEER	Organization Team, Junior Scientist and Industries Annual Meeting	Mar 2016
	Community Analyst, Quantitative Analytics and Trading Strategies of Cryptoassets	May 2018
	Research: data-driven analytics of blockchain projects and quantitative trading for crypto-market Technology: Python (<i>Flask, Pandas, Dash, Tkinter</i>) AWS (<i>RDS, EC2</i>) Heroku (<i>Postgres</i>) SQL	

- PUBLICATIONS **V. V. Trinh, M. Alamir, P. Bonnay and F. Bonne, Explicit model predictive control via nonlinear piecewise approximations**, in *Proceedings of the 10th IFAC Symposium in Nonlinear Control Systems*, Monterey, CA, USA, 2016.
- M. Alamir, V. V. Trinh and P. Bonnay, On the stabilization of fixed-point iterations arising in hierarchical control design**, in *Proceedings of the 20th IFAC World Congress*, Toulouse, France, 2017.
- M. Alamir, P. Bonnay, F. Bonne and V. V. Trinh, Fixed-point based hierarchical MPC control design for a cryogenic refrigerator**, *Journal of Process Control*, vol. 58, no. Supplement C, pp. 117-130, 2017.
- V. V. Trinh, K. P. Tran and A. T. Mai, Anomaly detection in wireless sensor networks via support vector data description with Mahalanobis kernels and discriminative adjustment**, in *Proceedings of the 2017 4th NAFOSTED Conference on Information and Computer Science*, Hanoi, Vietnam, 2017.
- V. V. Trinh, K. P. Tran and T. H. Truong, Data driven hyperparameter optimization of one-class support vector machines for anomaly detection in wireless sensor networks**, in *Proceedings of the 2017 International Conference on Advanced Technologies for Communications*, Quy Nhon, Vietnam, 2017.