Phuong Nguyen

Curriculum Vitae

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Education

2013–2014 **Master Degree**, *University of Paris 13*, *Math and Computer Science*. Specialize in Algorithm, Image and Mathematical Model.

2009–2013 B.Sci., Vietnam National University, Math and Computer Science.

Specialize in Analysis with Distinction. Dean's list in Graduation.

Thesis on the lower bound of Gromov-Hausdorff distance.

Supervisors: Dr. Huynh Quang Vu (Vietnam National University, Vietnam) & Assistant Professor Facundo Memoli (Ohio State University, USA).

2006–2009 **Diploma**, *Vietnam National University*, *High School for the Gifted*. Specialize in Computer Science with Distinction.

Miscellanies

2015 **Completion**, Coursera.

Clustering in Data Mining, University of Illinois at Urbana-Champaign - 96.7%. Machine Learning, Stanford University. - 98.4% Business Foundation Specialization, University of Pennsylvania. (On going)

Experience

Vocational

Aug Independent Researcher, Artificial Intelligence.

2015-Present Machine Learning, Neuroscience, and Data Analysis.

- Surveyed on three main areas: deep learning, decision tree and graphical models.
- Tested and run several novel algorithms in Python/ R/ Matlab.
- Achieved top 10 % of six Kaggle competitions.

May-July Research Engineer, Singapore Management University, Singapore.

2015 Data Privacy and Security in Information System. Supervised by Prof. Pang Hwee Hwang.

- Studied a theoretical framework based on support vector machine.
- Proposed and evaluated ideas to develop a new privacy model for database.
- \circ Built a prototype in R and C/C++ to test binary embedding methods.

April-Aug Research Intern, École Polytechnique, France.

2014 Computational Neuroscience. Supervised by Dr. Jing-Rebecca Li, HDR.

- Simulated a highly packaged model of neural dendrites in 3D by Matlab.
- Solved numerical analysis equations by finite volume method with Fortran90.
- Graded 16/20 by École Polytechnique and University of Paris 13.

- Apr 2012 **Research Intern**, W, Startup, Vietnam.
 - Dec 2013 Product Analysis, and Market Research.
 - Conducted quantitative analysis and studied potential competitors.
 - Assisted engineers to develop and promote products.

Management & Leadership

- Aug 2014- Manager & Content Leader, Vietnam team, INSPI.CORP, Startup.
- Apr 2015 Released over 600 original science-based/entertaining articles by managing a team of 3-7 people. Launched 3 new projects by researching and worked with engineers and marketers.
- Sep 2012- Project Manager, Vietnam National University, Ho Chi Minh City.
- Sep 2013 Built a knowledge base of Applied Mathematics in Science and Technology, with over 500 articles. Managed a core team with 7 members and nearly 100 participants in two years.
- Sep 2012- Chief Editor & Chief Executive, EXP Magazine, Ho Chi Minh City, Vietnam.
- Dec 2013 Run 2 digital versions of a student online magazine with 5 core writers and editors. Produced more than 20 highly qualified articles in various perspectives of Mathematics in life.
- Apr 2012- Manager, Frogsleap Foundation, N.G.O., Ho Chi Minh City, Vietnam.
- Dec 2013 Led a team of 3-4 members. Run 2 big projects. Coordinated 1 event and several internal social campaigns. Developed and managed 2 websites, e.g. the official and the project site.

Awards and Fellowships

- Ph.D scholarship at Singapore Management University awarded by Singapore Government in 2015.
- Master M2 scholarship awarded by Vietnam Government and Ecole Polytechnique at France in 2014.
- Ph.D Fellowship by the University of Adelaide Australia in 2013.
- Third Rank of Vietnam, Laos and Cambodia, "Go Green City" Creative Idea Contest, Schneider Electrics - France, 2013.
- Second Rank of "Adventure of Finding Solution", annual academic competition -Math and CS, Vietnam National University, 2012 (Team leader).
- Third Rank of "Excited at Computer Science", annual academic competition -Computer Science, Vietnam National University, 2011.

Skills and abilities

Programming MATLAB, R, Python (Advance), Jython, Javascript, C/C++, SQL, Linux cmd (Competent), Ruby. (basic)

Analyzing MATLAB, R, Pandas, JAVAPLEX.

Visualizing MATLAB tools, R packages, Matplotlib, D3, GRAPHVIZ.

Services

Oct 2015 - Writer & Editor, Viet Journal of Science.

Present Wrote and edited carrer news.

July 2013 - Class Monitor, Master Class, French Vietnam Program.

Dec 2014 Communicated between French Professors and Vietnamese students. Organized class in courses and other activities in Vietnam and France.

- March 2010 Class Monitor, Honour Class, Math and Computer Science.
 - Dec 2013 Communicated between lectures and students. Organized class activities in courses.
 - Oct 2011 Contributing writer, Viet Psychology Blog.
 - Dec 2012 Wrote three articles about psychology. Contributed to one project.
 - April 2012 Volunteer & Leader, Frogsleap Foundation, A Helping Hand Project.
- August 2012 Recruited new members. Led a volunteering group of 3-7 people. Supported members in two other teams in multiple outdoor/ indoor events.
 - Oct 2011 Member & Leader, Viet Youth Entrepreneur, Web team.
 - April 2012 Administered content including all articles and news. Designed a prototype of new website layout. Organized and facilitated team activities in three months.
 - Sep 2010 **Member**, Student Union Executive Board.
 - June 2011 Facilitated and encouraged academic activities in Math and Computer Science: two academic clubs in math and computer science, and academic activities in an honour class.
- June 2010 Volunteer, Vietnam National University, Green Summer.
- August 2011 Supported members in social and academic activities. Designed a digital magazine, and posters; a handmade diary. Won the first prize of the city for the best charity diary.
- 2009 & 2010 Organizer, High School for the Gifted Alumnna Group, "Entropy Challenge".

 Produced a movie, assisted with designing posters and standees by Adobe Photoshop, Adobe Illustrators and Sony Vegas. Supported tech and equipment in main/on-stage events.

Certificates

- 2012 Certificate, CFA Institute, Vietnam, CFA Research Challenge.
- 2011 Certificate, Stanford University, Viet Youth Entrepreneur, Gear Up Program.

Languages

Vietnamese Native Tongues

English Full Professional

French Basic level

Japanese **Elementary level**

Spanish **Elementary level**

Mandarin **Elementary level**

Competent in Reading nd Listening

Fluently peaking and Listening

Fluently Speaking

Fluently Speaking