

Phuong Nguyen

Curriculum Vitae

✉ emma.mphuong@gmail.com

📁 [emmanguyen.github.io](https://github.com/emmanguyen)



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 graded (Grade: 10.0/10.0).
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.

Experience

Vocational

- Aug **Independent Researcher**.
2015-Present Research Interests: Machine Learning, Neuroscience, and Data Analysis.
Identified goals and directions for further work by broadly surveying in Cognitive Science.
Experienced working with Python Libraries, e.g. Theano, for studying Object Recognition.
Achieved 99.2% for Machine Learning - Coursera; in top performers in Kaggle competitions.
- May-July **Research Engineer**, *Singapore Management University, Singapore*.
2015 Data Privacy and Security in Information System. Supervised by Prof. Pang Hwee Hwang.
Developed a new encryption protocol for servers by working on theory and mathematical framework. Built prototypes written in R and C/C++ to evaluate an efficiency of method.
- April-Aug **Research Intern**, *École Polytechnique, France*.
2014 Computational Neuroscience/ Applied Math. Supervised by Dr. Jing-Rebecca Li, HDR.
Generated highly packaged cellular configurations for neural dendrites in 3D by Matlab.
Simulated diffusion in brain matter by solving a numerical equations with finite volume method by Fortran90. Graded 16/20 by École Polytechnique and University of Paris 13.
- Dec 2012 – **Research Intern**, *W, Startup, Vietnam*.
Dec 2013 Product Analysis, and Market Research.
Studied and evaluated product features through quantitative analysis and competitor research in the world. Assisted in team of engineers and marketers to develop and promote product in the final round of an entrepreneur idea contest.
- July 2011 – **Private Tutor**.
Aug 2013 Taught Math and Science to High School Female Students preparing for Entrance Examination for University. Two of them are now students in Mathematics, and English Literature.

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**, *Frogleap Foundation, N.G.O.*, Ho Chi Minh City, Vietnam.
- Dec 2013 Led a team of 2-4 members to run 2 big projects, mainly in technology and information system. Developed and managed 2 websites, and several internal social campaigns.

Awards and Fellowships

- Four-year Ph.D scholarship by Singapore Management University in 2015.
- Master scholarship by Vietnam Government and Ecole Polytechnique in 2014.
- Three-year 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.
- Nguyen-Dinh-Chung-Song Mathematics Prize for the best students, 2006.
- First Rank in Mathematics for Excellent Students in Ho Chi Minh City, 2006.

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.

Certificates

- 2015 **Verified-Certificate**, *Completion*, Coursera, Clustering in Data Mining.
- 2012 **Certificate**, *CFA Institute*, Vietnam, CFA Research Challenge.
- 2011 **Certificate**, *Stanford University*, Viet Youth Entrepreneur, Gear Up Program.
- 2011 **Certificate**, *Vietnam National University*, Creative Ideas, Semi-finalist.

Services

- Oct 2015 – **Writer & Editor**, *Viet Journal of Science*.
- Present Wrote and edited career 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**, *Frogleap 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 Alumna 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.

Languages

Vietnamese	Native Tongues
English	Full Professional
French	Elementary level
Japanese	Elementary level

Competent in Reading and Listening
Fluently Speaking and Listening