



# Dung Do Vu



17 March 1985



2425, rue Joliette, Montreal,  
Quebec, Canada. H1W 3G7



+1 514 813 6660



[https://dungdovu.github.io/  
portfolio/](https://dungdovu.github.io/portfolio/)



[vudodung85@gmail.com](mailto:vudodung85@gmail.com)

## About me

I am a creative and critical thinking person, my passion is data mining & machine learning. I want to work in a global environment and create the useful products and services.

## Skills

Machine learning, Deep learning

React, Redux, Java

R, Python, C&C++, Shell

Agile&Scrum, QA

Mining, Analysis, Visualization

MongoDB, Hive, SPSS, SQL

Window, Linux, Tex, Office, Git

Matlab, Tableau,

Pycharm, IntelliJ

Positive\*3.5 Listening\*3.5  
Teamwork\*4.5 Organization\*4  
Management\*4.5 Training\*4.5

(\*)[The skill scale is from 0 (Fundamental Awareness)  
to 6 (Expert).]

## Interests

- Artificial Intelligence: Reasoning, problem solving, natural language processing, Perception, motion and manipulation, neural network, deep learning.
- Machine learning: Supervised, unsupervised, and reinforcement learning
- Big data analytic: Predictive analytic, data mining, text analytic, and statistical analysis

## Experience

7/2018-now Natural language generator at Korbit Canada  
Research the application of generating the Natural language for the Intelligence Tutor System

- Generate natural language contents (Hints, questions, answers)
- Create the API with Microservices for ML applications
- Work with platforms: Rasa, Elmo, Torch, Tensor-flow, Spacy
- Pre-process data: imbalance, unicode, symbol, math, etc.,
- Process data with CUDA, Multiple processors
- Work with AWS, Colab, Google cloud , notebook jupyter

3/2018-now Working on Artificial Intelligence at Lincs lab Canada  
Research the application for learning disability using Tensorflow, Opencv, Pycharm, DeepLearn.js, OpenAI, ConvNetJS, APIs

- Natural Language Processing in a smart Dialog system
- PhD thesis: Natural Language Generation for ITS

10/2017  
-2/2018 Working on Artificial Intelligence at Bibliomondo Canada  
Research Shazam Image project and Develop the User Interface of the Timesheet project.

- Research the application by using Python, and Android Studio, Webstorm, IntelliJ IDEA (e.g., Research the Object recognition and Hologram module)
- Create the language locale and UI module by using Reactjs, Momentjs, Redux-sagas at Timesheet project

2016 Working on Civil Infrastructure Platform Vietnam  
Apply OS patches and upgrades on a regular basis. Configure/add new services as necessary and maintain a big system based on big data analysis.

- Upgrade and configure system software that supports infrastructure applications or Asset Management applications per project or operational needs (Yocto, bash shell)
- Perform ongoing performance tuning, hardware upgrades, and resource optimization as required

2015 Working on crawling data from social network such as Twitter Korea  
Working on creating Machine learning model, making the insightful and supervised application.

- Develop the social media analysis applications (e.g., GeoSocial-Boundary, Detecting human, spammer, and bot on the social network, sentiment analysis) by using R program.
- Develop IoT applications (e.g., Demo of smart home, smart car; Object tracing and detecting; lane detection applications)

2012-2014 Working on Intelligent Transportation System (ITS) at HUST. Vietnam  
Creating some applications for the ITS: (Automatically detect and trace a vehicle in the real time)

2009-2012 Working on internal information technology audit at Tien Phong Bank. Vietnam  
Manage the IT risk and create the security information technology internal audit campaign: Create the risk table of information technology in the bank and the attack campaign to the core network.



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## Publications

- 2020 Cong Tran, **D. D. Vu**, and Won-Yong Shin, "An Improved Approach for Estimating Social POI Boundaries With Textual Attributes on Social Media", in Knowledge-Based Systems. 2020[https://www.sciencedirect.com/science/article/pii/S095070512030839X?utm\\_campaign=STMJ\\_AUTH\\_SERV\\_PUBLISHED&utm\\_medium=email&utm\\_acid=149362166&SIS\\_ID=&dgcid=STMJ\\_AUTH\\_SERV\\_PUBLISHED&CMX\\_ID=&utm\\_in=DM110556&utm\\_source=AC\\_Ekaterina\\_Kochmar](https://www.sciencedirect.com/science/article/pii/S095070512030839X?utm_campaign=STMJ_AUTH_SERV_PUBLISHED&utm_medium=email&utm_acid=149362166&SIS_ID=&dgcid=STMJ_AUTH_SERV_PUBLISHED&CMX_ID=&utm_in=DM110556&utm_source=AC_Ekaterina_Kochmar), **D. D. Vu**, Robert Belfer, Varun Gupta, Iulian Vlad Serban, Joelle Pineau, "Automated Personalized Feedback Improves Learning Gains in an Intelligent Tutoring System", in Artificial Intelligence Education 2020 [https://link.springer.com/chapter/10.1007/978-3-030-52240-7\\_26](https://link.springer.com/chapter/10.1007/978-3-030-52240-7_26)
- 2020 Iulian Vlad Serban, Varun Gupta, Ekaterina Kochmar, **D. D. Vu**, Robert Belfer, Joelle Pineau, Aaron Courville, Laurent Charlin, Yoshua Bengio, "Korbit: A Large-Scale, Open-Domain, Mixed-Interface Dialogue-Based ITS for STEM", in Artificial Intelligence Education 2020 [https://link.springer.com/chapter/10.1007/978-3-030-52240-7\\_70](https://link.springer.com/chapter/10.1007/978-3-030-52240-7_70)
- 2017 **D. D. Vu** and G. Kaddoum, "A Smart Waste City Management System for Smart Cities Applications," in Advances in Wireless and Optical Communications, Riga, Latvia, Nov. 2017 <https://ieeexplore.ieee.org/document/8228538/>
- 2017 W.-Y. Shin\* and **D. D. Vu**, "Density-based estimation of POI boundaries using geo-tagged tweets," Journal of KICS, vol. 42, no. 2, pp. 453-459, February 2017. [http://koreascience.or.kr/article/ArticleFullRecord.jsp?cn=GCSHCI\\_2017\\_v42n2\\_453](http://koreascience.or.kr/article/ArticleFullRecord.jsp?cn=GCSHCI_2017_v42n2_453)
- 2016 **D. D. Vu**, H. To, W.-Y. Shin, and C. Shahabi, "GeoSocialBound: An efficient framework for estimating social POI boundaries using spatio-textual information," in Proceedings of the International ACM SIGMOD Workshop on Managing and Mining Enriched Geo-Spatial Data (GeoRich), San Francisco, CA, June 2016. <https://dl.acm.org/citation.cfm?id=2948652>
- 2016 **D. D. Vu** and W.-Y. Shin, "SocialGeoFence: Detection of POI boundaries using spatio-textual information," in Proceedings of KICS Winter Conference, JeongSeon, Korea, January 2016, pp. 418-419.
- 2015 **D. D. Vu** and W.-Y. Shin, "Low-complexity detection of POI boundaries using geo-tagged tweets: A geographic proximity based approach," in Proceedings of the ACM SIGSPATIAL International Workshop on Location-Based Social Networks (LBSN), Bellevue, WA, November 2015. <https://dl.acm.org/citation.cfm?id=2830663>
- 2015 **D. D. Vu** and W.-Y. Shin, "Google Maps meet Twitter for location-based services," in Proceedings of CITW, Seoul, Korea, October 2015.
- 2015 **D. D. Vu** and W.-Y. Shin, "Detection of POI boundaries using geo-tagged tweets," in Proceedings of the Korean Institute of Communications and Information Sciences (KICS) Summer Conference, Jeju Island, Korea, June 2015, pp. 453-454 <http://www.dbpia.co.kr/Journal/ArticleDetail/NODE06388861>

## Revised/Submitted/In preparation

- 2021 F.St-Hilaire, N. Burns, R. Belfer, M. Shayan, A. Smofsky, I. V. Serban, E. Kochmar and **D. D. Vu**, A Comparative Study of Learning Outcomes for Online Learning Platforms, AIED 2021, accepted
- 2020 Ekaterina Kochmar, **D. D. Vu**, Robert Belfer, Varun Gupta, Iulian Vlad Serban, Joelle Pineau, Automated Data-Driven Generation of Personalized Pedagogical Interventions in Intelligent Tutoring Systems International Journal of Artificial Intelligence in Education, was accepted at IJAIED
- 2020 **D. D. Vu** and Sylvie Ratte, "When to intervene: Detection abnormal concept based on human debate conversation of a given topic.", revised
- 2020 **D. D. Vu** and Sylvie Ratte, "Automated Question and Answer Generation of Hint Interventions in Intelligent Tutoring Systems", in preparation



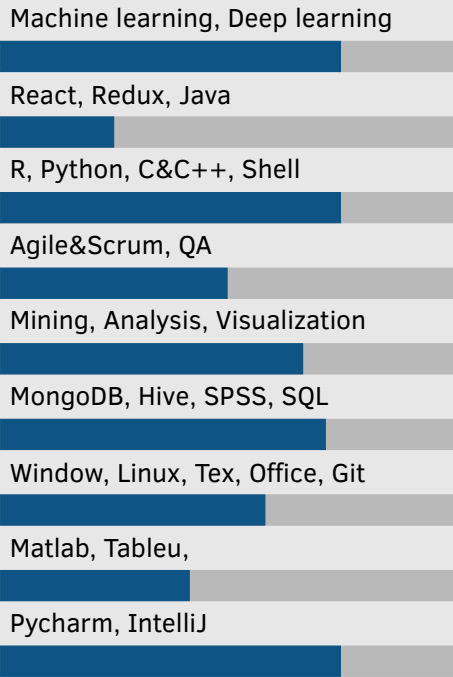
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Management\*4.5 Training\*4.5

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## Scholarship

- 2018 Mathematics of Information Technology and Complex Systems (Mitacs) : Fund for Basic Science Research Program in collaboration with industrial partner.
- 2016 National Research Foundation of Korea (NRF) and Ministry of Science, ICT& Future Planning (MSIP) : Fund for Basic Science Research Program.
- 2015 Brain Korea 21+ Program.
- 2009 Samsung Electronic Vietnam Scholarship for the Excellent 5th Year-Student of HanoiUniversity Of Sience and Technology .
- 2008 Panasonic Scholarship : Pannasonic-Sponsored Class For Embedded Software Development .
- 2004 Hanoi University Of Sience and Technolog scholarship: Scholarship for Excellent Student From 2004 to 2009 .

## Education

March, 2018	Ph.D. candidate in Ecole de technologie superieure Natural Language Generation for Intelligent Tutoring System	Canada
2015-2016	(course) Ph.D. student in Dankook University Big data in the social network	Korea
2012-2014	M.Sc. Hanoi University Of Science and Technology Application in Intelligent Transportation System	Vietnam
2004-2009	Hanoi University Of Sience and Technology The vehicle tracking system by using GSM and GPS.	Vietnam

## Social activities

- Volunteer of PMÉI - GRAND RDV des étudiants internationaux, 2017
- Co-founder Vietnamese Technology (Viettech) Community in Montreal, Canada, 2019
- Data science Mentor of MacHacks, 2021

## Social Contributions

- 2012-2014 Prize for people who has many contributions in the E-learning: Topica and ThanhGiong of Knowledge.
- 2018 Work with Korbit Inc which was one of top watching out startup in Canada 2020 with 5 persons and found by 2017  
<https://betakit.com/canada-sees-improvement-from-2019-as-eight-canadian-startups-appear-on-cb-insights-ai-100>
- 2020 Korbit is one of the winners of enlightED Awards 2020  
<https://www.enlighted.education/EN/enlighted-awards>
- 2020 Was nominated for the Mitacs award 2020

## Hobbies

- Commitment: Set the goal, approach the goal with an enthusiasm attitude
- Sport: Table tennis, Gym
- Music: Pop, R&B
- Communication: Community activities
- Reading: Books and news on the internet