CURRICULUM VITAE

Full name	Loc Nguyen
Other names	Nguyễn Phước Lộc Adam Nguyen
Religion	None
Titles	Engineer
Date of birth	August 29, 1979
Gender	Male
Citizen of	Vietnam
Organization	Loc Nguyen's Academic Network
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I. Education

09/1997 - 09/2001	**Bachelor of science in Information Technology** at Ho Chi Minh University of Science, Vietnam. The thesis is "*Building up the tourist information map for Ho Chi Minh city*".

II. Training Courses

04/2020	Diploma in Project Management certified by International Business Management Institute (IBMI).
04/2016	Mathematica Certificate - Student Level certified by Wolfram Technology Associate.

III. Languages

Vietnamese	Mother language.
English	Intermediate level.
Chinese	Basic level.

IV. Professional Knowledge

Computer science: Expert in following scientific domains:

- Excellent at algorithm and solving problems.
- Specialist of software engineering.

Computer technologies: Proficient in following technologies:

- Very good at programming languages: Java and C++.
- Very good at software architecture.
- Network and web programming.

- Desktop and windows applications.

V. Virtues and Soft Skills

Following are my best virtues:

- Commitment and loyalty are my greatest virtues. I always work in enthusiastic spirit and treat everyone by the same respectful manner.
- Be creative and always desire to invent new product.
- Be enthusiastic and always help people with pleasure and harmonious to join team work.

VI. Working Experiences

11/2017 – now	Independent Scholar at Loc Nguyen's Academic Network.
10/2011 - 08/2017	Director at Sunflower Soft Company, Vietnam as director with duties: researcher, software architecture, programming, administration, human resource and finance. Main area focuses on scientific project and data analysis.
2010 - 2011	Working at TMA Solution Company, Ho Chi Minh city, Vietnam as consultant with duties: researching and developing software. Main areas include programming CMS system, system driver, language processing, computer graphics, game, and mobile.
2008 - 2009	Working at following companies: • Working at Bixon Company as senior developer in programming on data integration software. • Working at SECUDE Company as senior developer with duty: developing the GUI so called Management Console for manipulating Smart Card (co-operate with another person). My main duties were to build up MVC model and write basic functions. This software allows administrator to store, search and manage information in smart card. I also develop encryption functions.
2005 - 2007	Working at An Giang University, Vietnam as researcher and lecturer with duties: • Lecturing at the Information Technology Department of An Giang University, Vietnam. • Developing educational software at the library of An Giang University, Vietnam as software developer and team leader.
2002 - 2005	Working at Center of Information Technology Development, Ho Chi Minh city, Vietnam as software developer and lecturer.
2001 - 2002	Working at WorldSoft Company, Vietnam as DirectX programmer for the project of surveying passenger luggage through X-ray tube at airport.

VII. Publications

1. Nguyen, L. (2014, December 5). *A User Modeling System for Adaptive Learning*. (L. Nguyen, Director, & L. Nguyen, Performer) The 17th International Conference on Interactive Computer aided Learning (ICL 2014), The 2014 World Engineering Education Forum (WEEF2014), Engineering Education For A Global Community, Dubai, UAE.
2. Nguyen, L. (2013, October 17). *Hudup: A Framework of E-commercial Recommendation Algorithms*. (L. Nguyen, Director, & L. Nguyen, Exhibitor) The 2013 conference "Approaches to Foreign Capital for Enterprises", Vietnam Chamber of Commerce and Industry (VCCI). Retrieved from http://www.hudup.net

VIII. Products and Projects

1. **JSI project - Jagged Strategy Investment manager.** (on going).
   Type Research project
   Abstract JSI provides lightweight software for investors to invest with stocks and forex products.
   Identifiers

Organizations *Operating agency*: Loc Nguyen's Academic Network
Funding agency:
Award agency:
Members: Loc Nguyen.
Role Leader
Amount
Duration 08/2021 - now (on going)
Links http://jsi.locnguyen.net

2. **SIM project (phase 1).** (2021, February).
Type Research project
Abstract SIM project provides recommendation algorithms and other machine learning algorithms along with tools to evaluate and deploy them. SIM is abbreviation of similarity, simulator, simoon, and sima. In the phase 1, SIM supports similarity measures in nearest neighbors algorithm for recommendation system. Published paper is available at https://www.sciencedirect.com/science/article/abs/pii/S0950705121001052.
Identifiers Grant Activity Code: R19093 - Zayed University, UAE.
Organizations *Operating agency*: Loc Nguyen's Academic Network. and Zayed University, UAE.
Funding agency: Zayed University, UAE.
Award agency: Zayed University, UAE..
Members: Loc Nguyen, Ali A. Amer, and Hassan I. Abdalla.
Role Co-leader
Amount 1,000$
Duration 03/2019 - 02/2021
Links http://sim.locnguyen.net

3. **REM - Regression models based on expectation maximization algorithm** (2018, September).
Type Research project
Abstract The project implements regression models based on expectation maximization (EM) algorithms in case of missing data.
Identifiers
Organizations *Operating agency*: Loc Nguyen's Academic Network.
Funding agency: Prof. Dr. Thu-Hang Thi Ho
Award agency: International Technology and Science Publications (ITS).
Members: Loc Nguyen, Thu-Hang Thi Ho.
Role Leader
Amount 1,600$
Duration 03/2018 - 09/2018
Links http://rem.locnguyen.net

4. **Hudup - A framework of e-commercial recommendation algorithms** (2013).
Type Research project and middleware
Abstract Recommendation algorithm is very important for e-commercial websites when it can recommend online customers favorite products, which results out an increase in sale revenue. I propose the framework of e-commercial recommendation algorithms. This is a middleware framework or "operating system" for e-commercial recommendation system, which support scientists and software developers build up their own recommendation algorithms based this framework with low cost, high achievement and fast speed. Moreover, two inventive algorithms for collaborative filtering based on mining maximum frequent set and Bayesian network are built inside the framework.

This project is accepted in the European Project Space on November 2015, Lisbon, Portugal. It is also my postdoctoral research in computer science, aforementioned in section Education.
Identifiers

Organizations *Operating agencies*: Sunflower Soft Company, Vietnam and Ho Chi Minh University of Information Technology represented by Prof. Dr. Minh-Phung Thi Do
Awarding agency: Vietnam Chamber of Commerce and Industry (VCCI).
Members: Loc Nguyen, Minh-Phung Thi Do.
Role Leader
Amount 76,000
Duration 2011 - 2013
Links http://www.hudup.net

5. **Phoebe - A framework of estimating fetus weight and age** (2013).
Type Research project
Abstract The project builds up a framework to estimate fetal weight and age via ultrasound measures. In general, this project has two objectives:
- Proposing an effective algorithm which produces highly accurate formulas. This algorithm is a heuristic approach that always results in optimal formulas by the fastest way.
- Introducing a framework that sets up the new algorithm in first goal and builds up a statistical tool which supports physicians and researchers in birth estimation domain. Moreover, physicians and researchers can discover new estimate formulas by themselves.

Note that I did the medical doctor research based on this project with the supervisor Prof. Ho, Thu-Hang T., aforementioned in section Education. The project is awarded and certified by Ho Chi Minh City Society for Reproductive Medicine (HOSREM) on November 2016, Vietnam.
Identifiers
Organizations *Operating agency*: Sunflower Soft Company, Vietnam.
Funding agency: Vinh Long General Hospital, Ministry of Health, Vietnam, pepresented by Prof. Dr. Thu-Hang Thi Ho
Members: Loc Nguyen, Thu-Hang Thi Ho.
Role Leader
Amount 1,400$
Duration 2011 - 2013
Links http://phoebe.locnguyen.net

6. **Zebra - A User Modeling System for Adaptive Learning** (2009).
Type PhD dissertation
Abstract This research proposes a learner model that consists of three essential kinds of information about learners such as knowledge, learning style and learning history. Such three characteristics form a triangle and so this learner model is called Triangular Learner Model (TLM). The ideology of TLM is that user characteristics are various and only some information is really necessary to adaptive learning and an optimal user modeling system should choose essential information relating to user's study to build up learner model. According to this ideology, TLM will cover the whole of user's information required by learning adaptation process and give the best support to adaptive learning. Moreover, TLM emphasizes on the inference mechanism by applying Bayesian network and Markov model into modeling user knowledge and learning style. Intelligent deduction is the best feature of TLM instead of providing user information only as normal user modeling system.

This project is also my PhD research in computer science and education, aforementioned in section Education. It is certified by The 2014 World Engineering Education Forum (WEEF2014) on December 2014, Dubai, UAE.
Identifiers
Organizations *Operating agency*: Individual and Prof. Dr. Bich-Thuy Thi Dong.
Academic agency: Ho Chi Minh University of Science, Vietnam.
Members: Loc Nguyen, Bich-Thuy Thi Dong.
Role Leader
Amount
Duration 2007 - 2009
Links http://zebra.locnguyen.net.

7. **AGmagic - An image searching framework** (2005).

Type	Master dissertation
Abstract	The research build up the image searching framework named AGmagic. The framework AGmagic uses the method Markov Model Mediator proposed by Professors Mei-Ling Shyu, Shu-Ching Chen, Min Chen, Chengcui Zhang, Kanoksri Sarinnapakorn to combine low-level features and high-level semantics contents of images in order to find images. Low-level features were extracted from segmentation, color histogram, color gradient, centroid. High-level semantic contents learned from user feedback are measures that reflect personal subjective feeling about the similarity among images. The combination of low-level features and high-level semantic contents gives out excellent result in searching images. Moreover AGmagic framework implements very successfully the segmentation algorithm proposed by Prof. Cao-Van Doan. AGmagic is also my master dissertation in computer science, aforementioned in section Education.
Identifiers	
Organizations	*Operating agency*: Individual and Prof. Cao-Van Doan. *Funding agency*: Ho Chi Minh University of Science, Vietnam and An Giang University, Vietnam. *Members*: Loc Nguyen, Cao-Van Doan.
Role	Leader
Amount	
Duration	2002 - 2005
Links	http://agmagic.locnguyen.net

8. **Design - Implementation of database algebra algorithms** (2004).

Type	Computer software
Abstract	The software *Design* implements most algorithms of database algebra, version 1.0 copyright 2000, which is developed when I was studying the subject "Database Design" with Prof. Dr. Diem-Tien Thi Nguyen at University of Science. The version 2.0 is issued in 2004 at the Center of Information Technology Development, now known as Ho Chi Minh University of Information Technology, Vietnam National University. Software Design is written in Microsoft Visual C++ 6.0. The next version will support operating directly on databases such as MS Access, MS SQL Server, MySQL, Oracle and has more enhanced functions.
Identifiers	
Organizations	*Operating agency*: Individual. *Academic agency*: Ho Chi Minh University of Science, Vietnam with the supervisor Prof. Dr. Diem-Tien Thi Nguyen *Members*: Loc Nguyen.
Role	Leader
Amount	
Duration	2000 - 2004
Links	http://design.locnguyen.net

IX. Honors and Awards

Date	Honors and awards
2020	The research "Enhancing recommendation systems performance using highly-effective similarity measures" was supported by Research Incentive Fund (RIF), Grant Activity Code: R19093 - Zayed University, UAE.
08/2013	Best innovators award for the course "Business Plan & Innovation" with the contesting product "*Hudup - A framework of e-commercial recommendation algorithms*". Vietnam Chamber of Commerce and Industry (VCCI), Vietnam-Germany University and Leipzig University.

X. Talks and Interviews

03/2021	Invited lecturer (online) at International Workshop of Advancement and Applications of Mathematics and Statistics in Artificial Intelligence and Machine Learning, organized at School of Advanced Sciences and Languages - VIT Bhopal University, sponsored by IEEE, held on 19th - 20th March 2021, Madhya Pradesh, India.

XI. Activities

Memberships

2008 - 2010	Member of Institute of Electrical and Electronics Engineers (IEEE).
2008 - 2009	Member of Association for Computing Machinery (ACM).

Participations

11/2015	Participating in the European Project Space with the project "Hudup - A framework of e-commercial recommendation algorithms" at The 7th International Conference on Knowledge Discovery and Information Retrieval (KDIR 2015), Lisbon, Portugal.
12/2014	Presenting the conference paper "Evaluating Adaptive Learning Model" and demonstrating the research "A User Modeling System for Adaptive Learning" in The 17th International Conference Interactive Collaborative Learning (ICL2014), The 2014 World Engineering Education Forum (WEEF2014) at Dubai, UAE.
10/2013	Exhibiting product "Hudup - A framework of e-commercial recommendation algorithms" at The 2013 conference "Approaches to Foreign Capital for Enterprises", Vietnam Chamber of Commerce and Industry (VCCI).

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