



HENRY DUONG, PhD

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ENGINEERING SKILLS

- Extensive knowledge of computer systems and information technology systems;
- Analyze, improve and upgrade the computer system;
- Financial analytics and problem-solving skills;
- Communication skills and creative thinking;
- Database: MS SQL, MySQL, HDFS, Hive, Impala, CUDA, Spark, TensorFlow;
- Statistics software: R, Eviews, SAS, SPSS;
- Experience in Cloudera, AWS, Azure;

CERTIFICATIONS

- Japan Information-Technology Engineer Skill Standards;
- Chartered Financial Analyst (CFA);
- Chartered Alternative Investment Analyst (CAIA);
- Professional Risk Managers' International Association (PRM);
- Energy Risk Professional (ERP);
- Society of Actuaries (SOA): Exam P, FM, MFE, C, VEE and FSA Life modules;
- Casualty Actuarial Society (CAS): Exam ST.

WORKING EXPERIENCE

Founder

TAHK Foundation - Anaheim, CA, United States

- Fundraise for charity and distribute donations for charitable purposes and education; provide financial resources, support and mentorship to individuals and communities in need.

03/2023 - current

Chair of Membership

CFA Society Saskatchewan - Saskatchewan, Canada.

- Managing the society's growth and retention of members and volunteers.

07/2017 - current

Computer Systems Analyst

ITSJ-Group

490 Parrott St., San Jose, CA. 95112, United States

- Analyze different technologies to decide whether they would increase the organization's efficiency.
- Research costs and benefits of information technology systems and upgrades to help managers decide which to install.
- Analyzes how data processing can be applied to the specific needs of users.
- Install new systems and customize them for the organization.
- Participate in raising funds for the company.

01/2023- 03/2023

QT-Group

Da Nang & Saskatchewan & British Columbia

- Advice managers to determine the role of information technology systems in an organization.
- Devise methods to add functionality to existing computer systems.
- Analyzes how data processing can be applied to the specific needs of users.
- Designs and implements computer-based processing systems.
- Specializing in data by combining state-of-the-art ML/AI algorithms, blockchains/distributed ledger technology and software solutions with *500+ engineers*.
- Long-term commitment with premier professional services to provide a comprehensive data-driven business solution.

02/2017- 12/2022

Data Scientist - System analyzing**02/2016 - 01/2017****Tenpoint7** - Greater Seattle Area, United States; HoChiMinh, Vietnam.

- Accelerating client business via data-driven insights with both scientific and practical AIs: rethinking hospitality management.
- Analyzing costs and benefits of information technology systems and customizing them to suit the needs of users.
- *Leading* a team of 7 data scientists and engineers for R&D projects on Spark and TensorFlow in price optimization and fraud detection.

Co-founder & Head of Quantitative and Computational Finance Lab**07/2010 - 01/2017****John von Neumann Institute** – HoChiMinh, Vietnam

- Chair of *data-driven business development* and being *chief technical officer* for most of JVN industrial projects on Cloudera 2.5 about: human resource with Vsource, supply chain with Vingroup, credit scoring with BIDV, stock loan margin management with HSC, demographic with BlueSeed, android and iOS app-based retail analysis with and AWS based big data integration with FCV, and fraud detection with VGN Game.
- Developing products following the requirements of clients.
- *Managing* 30+ PhD, PhD student and master (exchange) student researchers working on industrial contracts and R&D financial projects with *entrepreneurial* spirit.
- *Achievement*: Increasing the number of researchers from 5 to 30+ in two years.

Visiting Researcher**09/2014 - 9/2015****Buskerud and Vestfold University College** – Vestfold, Norway

- Calibrating ultrasound data by MLE for building up a numerical simulation tool with graphical interface in MATLAB that can model and optimize the performance of transducers in health product

Quantitative Investment Manager**10/2009 - 01/2014****VietFund Management (VFM)** – HoChiMinh, Vietnam

- *Managing* 5 researchers on applying quantitative, statistical and machine learning methods for analyzing Vietnam security data to build innovative trading strategies adjusted by risk acceptant level.
- Design new information technology systems that can be applied to the specific needs of the organization.
- *Achievement*: Creating the first quantitative product and ETF product in the local market: VFMVFA, E1VFN30. - *Raising a total of 500+ billions VND.*

Professor**07/2004 - 12/2012****Ton Duc Thang University & Broward College & University of Science** – HoChiMinh, Vietnam

- *Teaching* undergraduate courses in Monetary and Financial Theory and Quantitative Finance. Supervising undergraduate theses and conducting research in applied mathematics and computer sciences.
- *Chair* of mathematics curriculum, teaching business statistics, financial statistics and applied linear algebra.
- *Leading* 10+ researchers on Information Science & Applied Mathematics.
- *Chair* of mathematics curriculum for exchange programs with Saxion University in the Netherlands and teaching undergraduate courses: Numerical Analysis, Software Engineering and Statistics.

Team leader on IT projects**12/2002 - 06/2004****Silicon Design Solutions** – HoChiMinh, Vietnam

- *Leading* 5+ software engineers for upgrading memory compiler software, automatically generating test patterns for Texas Instrument library, and some simulation projects using VHDL and Verilog.

VOLUNTEER EXPERIENCE

- 2018 - current **Data Ambassador, *Data for Good***
- 2017 - current **Member of Board of Directors, *CFA Society Saskatchewan***
- 2015 - 2016 **Grader and mentor, *CFA Institute***

EDUCATION

- 2010 - 2010 **Postdoctoral researcher: *Machine learning methods in finance***
Japan Advanced Institute of Science and Technology (JAIST) - Kanazawa, Japan
- 2007 - 2009 **PhD: *Robustness of dynamical systems***
Vietnam National University – HoChiMinh, Vietnam
- 2005 - 2008 **Master of Computer Science: *Sparse principal component analysis***
- 2004 - 2007 **Master of Mathematical Science: *Analysis***

1999 - 2003 **Bachelor of Science: *Mathematics and Computing Science***

RESEARCH

5+ international and national research projects: Principal & member.

30+ publications in control optimization, machine learning and financial engineering.
https://scholar.google.com.vn/citations?hl=en&view_op=list_works&qmla=AJsN-F4KI2rAloqUCSzATsXktiW8wYchQJ4s-gaxPNGRBjBs2GXczXiluYG6cPY6lwrlrzKeVwjht_XzVEhjYkH0tpjHUCQ&user=FtCo0vcAAAAJ

LANGUAGES

English: Fluent.

Norwegian: Limited Basic.

Vietnamese: Fluent.

HONORS

- Visiting fellowship of Japan Advanced Institute of Science and Technology 2010.
- IEEE Seoul Section & Japan Council Scholarship 2009.
- Best Student - Paper Award of IEEE Vietnam Section in Computer Science 2008.
- Vietnam Education Foundation (VEF), and the U.S. National Science Foundation (NSF) Scholarship (for participating in Digital Signal Processing Summer School/Seminar 2008).
- Third honor of National Mathematics Competition 1999.
- Bronze medal in South Vietnam's Mathematics Olympic 1998.

HOBBIES football, sepak takraw, table tennis, tennis, badminton and Taekwondo; guitar and bamboo flute.