Tuan Nguyen-Anh

Information Science and Technology (M. Sc.)

- 6 August, 1988 in Vietnam
- Vietnamese
- Single

Skills

Computer Vision & Machine Learning 7+ yrs.

Deep Learning 5+ yrs.

Software development 4+ yrs.

Web development 3+ yrs.

Data science 3+ yrs.

Internet of things 1+ yrs.

Cloud computing 1+ yrs.

Japanese N1 equiv.

English TOEIC 900

Biography

I was born in Vietnam in 1988. From the initial stages of learning, I have joined several contests and was awarded prizes in National Mathematics Olympiads. After joining the university in Japan, I transferred the interests with numbers to information science and technology. Under the scope of undergraduate research, I developed an algorithm for accurate and efficient search for nearest neighbors in large-scale high-dimensional datasets. This development had applications in Image Processing and Computer Vision. Under the journey in the Graduate School of Information Science and Technology of the University of Tokyo, Japan, I extended my interests to Computer Vision with the help of Machine Learning, and later, Deep Learning. The outcome was an extensive learning mechanism for representations using Deep Learning architectures and normalization.
Recently, I have paid particular attention to behavioral pattern recognition using Deep Learning. This attention has led me to several developments with applicable outcomes with high accuracy and efficiency.

Work experience

AI/IoT Engineer | BrSE/PM **01/2021 - today**
NeosCorp Vietnam

We are building products with targets on enterprise customers. I lead the team with advisors from Japan to provide AI applications that analyze and accelerate decisions in a real-time manner. Using Python programming language, with knowledge about major deep learning and machine learning frameworks such as Tensorflow 2 (Keras), PyTorch, and Scikit-learn, I build and demo the programs to clients in weekly meetings. Besides these, serving as a bridge system engineer (BSE) with targets on project manager career path, I am practicing the methodologies in managements such as Scrum (Agile) aiming at deriving customer success. Thanks to the help of Cloud computing, I achieved several demos with centralized processing units in the cloud like AWS. Moreover, I am also developing cloudless applications (without cloud computing) to enhance privacy, reduce security attack vectors and increase stability.

AI Engineer **04/2020 - 12/2020**
Freelancers at multiple places in Vietnam

I have spent 9 months during the Corona, to visit many places in Vietnam from Hanoi to Saigon. Working as a freelancer and visiting as much as possible before coming back to the urban environment, I have gained an extraordinary experience in the life. I applied knowledge in developing machine learning applications and offshore projects to deliver demo successes.

RA/TA | PhD Student **04/2017 - 03/2020**
University of Tokyo, Japan

I supported lecturers at the faculties to deliver their knowledge to a large population of students. I also supported to implementation and execution of projects under PI's instructions. I gained the research methods which are learned through experiments and apprenticeship. I learned important skills in Computer Vision and Machine Learning, such as Python language, Deep Learning frameworks, Machine Learning algorithms, and Computer Vision applications such as Object Detection and Action Recognition.

Education

04/2015 - 03/2017

Information Science and Technology (M.Sc.)
University of Tokyo

Computer Vision, Machine Learning and Deep Learning
Master's thesis: "Fine-grained Object recognition with Non-geometric features".

04/2012 - 03/2015

Information and Communication Engineering (B.Sc.)
University of Tokyo

Computer Vision, Information and Communication Engineering
Bachelor's thesis: "Searching for Nearest Neighbours using Secondary Candidates".

Interests

- Swimming
- DIY
- Travel

Contact

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www.caineng.in
github.com/wanted2

Research Associate **02/2018 - 08/2018**
Language Technology Institute (LTI)
Carnegie Mellon University, US

Learning through a half-year project, I gained research methodologies in Video Processing, Action/activity Recognition, deep learning and machine learning. The project outcome was a dataset and a program to detect accidental moments in traffic scenes, which is promising for practices.

RA/TA | Master Student **04/2015 - 03/2017**
Global Creative Leader
University of Tokyo, Japan

Under the scope of graduate research, I joined the Global Creative Leader (GCL) program at the university. I joined several activities to enhance the dissemination of knowledge to society. Aiming at social impact, I proposed several research directions and helped the execution of other projects.

Web Developer **10/2012 - 10/2015**
AppResearch Inc., Tokyo, Japan

As a junior SE, I developed a text analytical program using Ruby programming language (Ruby on Rails framework) and various technologies such as Apache Lucene and text search. With the practice of Agile, I and colleagues formed a self-learning mechanism among the company with weekly discussions and self-improvement cycles for each individuals. The analytical program was a demo success with a customized dashboard for users interacting with information in the display.

Publications

- Shah, A. P., Lamare, J. B., Nguyen-Anh, T., and Hauptmann, A., "CADP: A novel dataset for CCTV traffic camera-based accident analysis." In *2018 15th IEEE International Conference on Advanced Video and Signal Based Surveillance (AVSS)*, IEEE, 2018.
- T. A. Nguyen, Y. Matsui, T. Yamasaki and K. Aizawa, "Searching for nearest neighbors with a dense space partitioning," in *Proc. ICIP*, IEEE, 2015.
- Nguyen, T. A., Matsui, Y., Yamasaki, T., and Aizawa, K., "Selective K-means Tree Search." In *Proceedings of the 23rd ACM international conference on Multimedia*, ACM, 2015.

Hanoi, 11th May 2021

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