

DOAN HUU NOI

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EDUCATION

Soongsil University, Seoul, South Korea

Sept 2013 - July 2015

Master's Degree in Video & Image Processing.

Post and Telecom. Institute of Tech., HCM City, Vietnam

Sept 2008 - Jan 2013

Bachelor's Degree in Computer Science.

PUBLICATION

[Google Scholar Profile](#)

1. **A Method for matching pattern using image and an apparatus of thereof**, HN. Doan, KS. Kwon, S. Korea Domestic Patent, 2021, Submitted for Reviewing: 출원번호: 10-2021-0025073, [View Demo](#).
2. **Method for hole filling in 3D model, and recording medium and apparatus for performing the same**, US Patent, MC. Hong, BS. Kim, TD. Nguyen, HN. Doan, 2018, [PDF](#).
3. **Hole-Filling algorithm with spatio-temporal background information for view synthesis**, IEICE Trans. on Information and Systems, HN. Doan, TD. Nguyen, MC. Hong, 2017, [PDF](#).
4. **A spatial-temporal hole filling approach with background modeling and texture synthesis for 3D video**, Proceedings of the 2015 Conf. on research in adaptive and convergent systems, HN. Doan, MC. Hong, 2015, [Link](#).
5. **Hole filling algorithm using spatial-temporal background depth map for view synthesis in free view point television**, Pacific Rim Conf. on Multimedia, HN. Doan, BS. Kim, MC. Hong, 2015, [Link](#).
6. **Directional hole filling algorithm in new view synthesis for 3D video using local segmentation**, Proceedings of the 2014 Conf. on Research in Adaptive and Convergent Systems, HN. Doan, TA. Nguyen, MC. Hong, 2014, [Link](#).

BACKGROUND

Programming	C++, SIMD (SSE, AVX), OpenGL, QT, CUDA
Research	Image Processing, Computer Vision, Pattern Matching, Object Detection, Machine Learning, 3D Rendering, Defect Inspection
Language	Vietnamese, Korean, English

EXPERIENCE

MVTech

Nov. 2018 - Current

Image Processing Researcher

South Korea

- Participate in developing RAVID framework
 - Develop Shape Finder algorithm which is a feature-based matching algorithm. ([View Demo](#))
 - Develop very fast convolution, morphology operation by using SIMD, In-Place Processing.
 - Develop OCR algorithm based on NCC matching algorithm.
- Develop defect inspection algorithms for inspection machines.
- Technologies: C/C++, SIMD, Image Processing, Computer Vision.

Enscape*Software Engineer*

Feb. 2017 - Oct. 2018

South Korea

- Develop defect inspection algorithm by using Halcon.
- Develop application for Matrix machine, Auto-Handler machine.
- Technologies: C++, MFC, Halcon, OpenCV, SIMD.

Chowis*Software Engineer*

Sept 2015 - Oct. 2016

South Korea

- Develop Android application for skin inspection kit.

PERSONAL PROJECTS

Technical Blog

I write articles to describe what I have learnt about Image Processing, Computer Vision, Machine Learning, 3D Rendering and other miscellaneous. Moreover, I develop the XImageTool application to demonstrate how those algorithms work intuitively.

XImageTool

A free tool for simulating fundamental Image Processing, Computer Vision, Machine Learning algorithms and 3D Rendering.

XImageToText

XImageToText is a free OCR software.

XImageTrainer

XImageTrainer is free software using for preparing image data and collaborates with other DeepLearning frameworks to train the dataset. Without a good GUI tool, drawing a bounding box for objects of thousand images would be a painful job. XImageTrainer provides a basic tool to make this task more convenient and simple.