# 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

Interesting Topics Image Processing, Computer Vision, Pattern Matching, Machine Learning, 3D Render

Language Vietnamese, Korean, English

#### **EXPERIENCE**

MVTech
Image Processing Researcher
Nov. 2018 - Current
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 Sept 2015 - Oct. 2016 Software Engineer South Korea

· Develop Android application for skin inspection kit.

### PERSONAL PROJECTS

#### **XImageTool**

A free tool for simulating Image Processing, Computer Vision and Machine Learning algorithms.

## **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.