Lam Huynh

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Personal website

Google Scholar

LinkedIn

Interests

- Machine Learning/Deep Learning
- Automated Machine Learning
- 3D Computer Vision
- 3D Scene Understanding
- Novel View Synthesis

Skills

Programming:

- Python
- C++
- Java
- Matlab
- Bash script

Tools / Frameworks:

- Pytorch
- Tensorflow
- OpenCV
- Git

Languages

Vietnamese (Native)

English (Full Professional)

Finnish (Elementary)

Working Experience

Nov, 2021 – ongoing — **Machine Learning Team Lead** — **CubiCasa, Finland**
Leading the ML team working on the automation project.

Oct, 2022 – ongoing — **Researcher** — **University of Oulu, Finland**
Specialized on 3D Computer Vision and Deep Learning.

Oct, 2018 – Sep, 2022 — **Doctoral Candidate** — **University of Oulu, Finland**
Working on the topic of 3D Computer Vision using Deep Learning.

Jul, 2018 – Oct, 2018 — **Visiting Researcher** — **Nara Institute of Science and Technology, Japan**
3D Human Pose Estimation for sprint using DL together with M.Sc. Yuma Ouchi, M.Sc. Taisei Watanabe and Prof. Takafumi Taketomi.

Oct, 2017 – Jul, 2018 — **Machine Learning Researcher** — **CubiCasa, Finland**
Working on the VBIM project.

Jun, 2017 – Sep, 2017 — **Research Assistant** — **University of Oulu, Finland**
Developing the desktop and mobile application for 3D Head Pose Estimate using Deep Neural Networks.

Jun, 2015 – August, 2016 — **Indie Game Developer** — **PigCell Game Studio, Vietnam**
Developing game titles include FunWaysToGuess, BanCa.

August, 2011 – May, 2015 — **Game Developer** — **VNG Game Studio, Vietnam**
Developing game titles include UnIn, HappyMe, Dead Target.

Education

Oct, 2018 – Sep, 2022 — **Ph.D. in Computer Science and Engineering** — **University of Oulu, Finland**
Title: From 3D Sensing to Dense Prediction.
Supervisors: Prof. Janne Heikkilä, Prof. Esa Rahtu.

Sep, 2016 – Sep, 2018 — **M.Sc. in Computer Science and Engineering** — **University of Oulu, Finland**
Title: Structure-from-motion Using Convolutional Neural Networks.
Supervisors: Prof. Janne Heikkilä, Dr. Markus Ylimäki.

Sep, 2008 – Sep, 2012 — **B.Sc. in Computer Science** — **University of Information Technology, Vietnam**
Title: Towards Vietnamese Recognition using Sphinx4.
Supervisor: Prof. Dang Nguyen-Tuan.

Selected Publications

- Lam Huynh, Phong Nguyen, Jiří Matas, Esa Rahtu, Janne Heikkilä, **Guiding Monocular Depth Estimation Using Depth-Attention Volume**, *ECCV 2020, Glasgow-UK*.
- Phong Nguyen, Lam Huynh, Esa Rahtu, Janne Heikkilä, **Sequential View Synthesis with Transformer**, *ACCV 2020, Kyoto-Japan*.
- Lam Huynh, Matteo Pedone, Phong Nguyen, Jiří Matas, Esa Rahtu, Janne Heikkilä, **Monocular Depth Estimation Primed by Salient Point Detection and Normalized Hessian Loss**, *3DV 2021, Surrey-UK* .
- Lam Huynh, Phong Nguyen, Jiří Matas, Esa Rahtu, Janne Heikkilä, **Boosting Monocular Depth Estimation with Lightweight 3D Point Fusion**, *ICCV 2021, Montreal-Canada*.
- Lam Huynh, Tri Nguyen, Thu Nguyen, Susanna Pirttikangas, Pekka Siirtola, **StressNAS: Affect State and Stress Detection Using Neural Architecture Search**, *ACM UbiComp 2021*.
- Lam Huynh, Phong Nguyen, Jiří Matas, Esa Rahtu, Janne Heikkilä, **Lightweight Monocular Depth with a Novel Neural Architecture Search Method**, *WACV 2022, Hawaii-USA*.
- Phong Nguyen, Lam Huynh, Esa Rahtu, Jiří Matas, Janne Heikkilä, **HRF-Net: Holistic Radiance Fields from Sparse Inputs**, *arXiv 2022 (Submitted to TPAMI)*.
- Lam Huynh, Esa Rahtu, Jiří Matas, Janne Heikkilä, **Fast Neural Architecture Search for Lightweight Dense Prediction Networks**, *arXiv 2022 (Submitted to TPAMI)*.

Teaching Experience

University of Oulu — **Deep Learning Course (Associate Prof. Li Liu)**
Spring'18, Autumn'19, Autumn'20, Autumn'21.
TA alongside M.Sc. Zhuo Su, Dr. Mohammad Tavakolian, and Yawen Cui.

Academic Activities

Reviewer — AAAI, ECCV, WACV, ICME, ICASSP, TPAMI, Neurocomputing, IET Computer Vision

Honours and Awards

Oct 2009 — Honorable Mention, ACM-ICPC Vietnam National Contest. Good work with An Cao and Anh Nguyen. — NhaTrang, Vietnam

Oct 2010 — Third Prize, ACM-ICPC Asia Regional Contest. Good work with An Cao and Bao Le. — Hanoi, Vietnam