PHAM QUANG HIEU

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WORK EXPERIENCE

Software Engineer   07/2021 – present
Woven by Toyota — *Palo Alto, CA*
- Tech lead of the Online Perception team (10+ engineers). Working on end-to-end Perception Foundation Model that utilizes multiple sensor modalities.
- Tech lead of the Edge Compute team consisting of 5+ engineers. Worked on model profiling, optimization, quantization and model deployment.
- Designed and developed a long-range (>100m) vision-based 3D detection model for our real-time perception system.

Software Engineer   05/2021 – 07/2021
Lyft Level 5 — *Palo Alto, CA*
- Developed a new free-space prediction model in the perception stack for static obstacle avoidance.
- Lyft Level 5 was acquired by Woven by Toyota in July 2021.

Research Intern   08/2020 – 11/2020
Meta Reality Labs — *Singapore*
- Researched and developed a deep learning method for high-fidelity 3D eye segmentation using implicit neural representations.

Software Engineering Intern   02/2020 – 06/2020
Lyft Level 5 — *Palo Alto, CA*
- Improved the performance of a LiDAR-based detection model on large vehicles.
- Led the migration effort of the detection code base from TensorFlow to PyTorch.

SELECTED PUBLICATIONS   [Google Scholar](#)

A∗3D: An autonomous driving dataset in challenging environment   ICRA 2020
Quang-Hieu Pham, Pierre Sevestre, Ramanpreet Singh Pahwa, Huijing Zhan, Chun Ho Pang, Yuda Chen, Armin Mustafa, Vijay Chandrasekhar, and Jie Lin

JSIS3D: Joint semantic-instance segmentation of 3D point clouds with multi-task pointwise networks and multi-value conditional random fields   CVPR 2019
Quang-Hieu Pham, Duc Thanh Nguyen, Binh-Son Hua, Gemma Roig, and Sai-Kit Yeung

Real-time progressive 3D semantic segmentation for indoor scenes   WACV 2019
Quang-Hieu Pham, Binh-Son Hua, Duc Thanh Nguyen, and Sai-Kit Yeung

EDUCATION

Singapore University of Technology and Design (SUTD)   2016 – 2020
Ph.D. in Computer Science
- SUTD President's Graduate Fellowship

Vietnam National University - Ho Chi Minh City University of Science   2010 – 2014
B.S. in Computer Science
- Summa cum laude

SKILLS

- **Languages**: English (fluent), Vietnamese (native)

- **Programming**: C/C++, Python, CUDA, PyTorch