Chuong **Huynh**

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Education

University of Maryland, College Park — ***MD, U.S.A.***
Ph.D. in Computer Science – AI/Computer Vision — *2021 – 2026*
GPA: 3.83/4.0, Advisor: Professor Abhinav Shrivastava

University of Science – Vietnam National University — ***Vietnam***
Bachelor of Science in Honors Program – Information Technology — *2014 – 2018*

Selected Publications

SimpSON: Simplifying Photo Cleanup With Single-Click Distracting Object Segmentation Network — ***CVPR'23***
Chuong Huynh, Yuqian Zhou, Zhe Lin, Connelly Barnes, Eli Shechtman, Sohrab Amirghodsi, Abhinav Shrivastava — *Tech transfer to Photoshop*

Progressive Semantic Segmentation — ***CVPR'21***
Chuong Huynh, Anh Tran, Khoa Luu, Minh Hoai — *111 stars on github, 58 cites*

Research Experience

University of Maryland, College Park — ***MD, U.S.A.***
Composing Object Attributes and Relationships for Image-Text *(Advisor: Prof. Abhinav Shrivastava)*: Improve the Image-Text Alignment by ↑4-8 RSUM on Flickr30K with GNN. — *April 2022 - present*

Adobe Research – Adobe Inc. — ***Remote, U.S.A.***
Human Instance Video Matting with Mask Guidance *(Mentor: Dr. Joon-Young Lee):* More efficient (↑1.5-3.0x speed, ↓25% mem), more accurate (↓23 MAD) than InstMatt along with a self-supervised training strategy on VIS dataset. — June 2023 - present

Photoshop ART – Adobe Inc. — ***Remote, U.S.A.***
One-single-click to select all objects *(Mentor: Dr. Yuqian Zhou):* The first baseline in finding similar objects with user one-click, also get ↑4-8 AP comparing to interactive segmentation. — *June 2022 – May 2023*

VinAI Research — ***Vietnam***
High-resolution semantic segmentation *(Mentor: Prof. Minh Hoai):* Combine global and local context at different scales to yield 1-2% mIoU improvement (PointRend, SegFix, GLNet) on Cityscapes, DeepGlobe, and Gleason datasets. — *Jul 2019 – Apr 2021*

Honors & Awards

2021 **Dean's Fellowship** – Ph.D. UMD
2020 **Top 2%** (19/1317) in FGVC Challenge, CVPR Workshop
2019 **Bronze medal** – top 7% (196/2931) in APTOS Kaggle Competition
2019 **Best poster presentation** in Southeast Asia Machine Learning School, Indonesia

Skill Sets

Languages: Python (Proficient), C/C++ (libtorch, TensorRT), Java, Javascript
Frameworks: PyTorch, libtorch, Tensorflow (1.0, 2.0), TensorRT, Scikit-Learn, Numpy, OpenCV, Docker, AWS, GCP