

DAT HUYNH

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🌐 <https://hbdat.github.io/>

🐙 <https://github.com/hbdat>

🌐 [linkedin](#)

Education

Northeastern University

Ph.D. in Computer Science: 3.97 / 4.00

Aug. 2017 – Oct. 2022

Boston, Massachusetts, USA

Nanyang Technological University

Exchanged Scholarship from Temasek Foundation: 5.00 / 5.00

Aug. 2014 – Dec. 2014

Singapore

Advanced Program in Computer Science, University of Science

B.S. in Computer Science (ranked 2nd in class 2012 with High Distinction): 3.95 / 4.00

Sep. 2012 – Nov. 2016

Ho Chi Minh City, Vietnam

Engineering Skills

Languages: Python (Proficient); C++, Java, JavaScript, MATLAB (Prior Experience)

Technologies/Frameworks: Detectron, PyTorch, Tensorflow, Scikit-Learn, Numpy, Docker, AWS, GCP, OpenCV, Linux

Work Experience

Meta, Search AI

Design Efficient and Effective Large Language Models for Large-scaled Production

Oct. 2022 – Present

J.P. Morgan AI Research

Learnable Augmentation for Financial Time Series Prediction (1 patent).

Jun. 2022 – Sep. 2022

Mentors: Dr. E. Fons, Dr. S. Vyetrenko

Adobe Research

Large-scale visual segmentation for Adobe Stock search (2 patents).

May. 2021 – Sep. 2021

Mentors: Dr. J. Kuen, Dr. Z. Lin, Dr. J. Gu

MCADS Lab, Northeastern University

Research Assistant

Aug. 2017 – Present

Advisor: Prof. E. Elhamifar

- **Image Recognition:**

- ▷ Developed a shared-attention model to recognize unseen labels and scaled to 7000 seen and 400 unseen labels.

- ▷ Developed a dense-attention model to recognize new fine-grained classes with 4% improvement on fashion recognition.

- ▷ Developed a semi-supervised model to learn from 9M partially labeled images and improved 2% performance.

- **Video Understanding:** Developed a self-supervised method to classify and summarize complex actions in videos from YouTube without human segmentation annotations and gained 3% improvement on 18 activities in 2.7K videos.

- **Action Recognition:** Developed a compositional method to localize/classify unseen human-object interactions based on spatial relations and significantly improved performances by 2.6%.

Selected Research Projects – (Full Publications: Google Scholar)

Open-Vocabulary Instance Segmentation

Dat Huynh, Adobe: {Jason Kuen, Zhe Lin, Jiuxiang Gu}, Ehsan Elhamifar

CVPR22

github

Interaction Compass: Zero-Shot Learning of Human-Object Interactions

Dat Huynh, Ehsan Elhamifar

ICCV21

github

Compositional Zero-Shot Learning via Fine-Grained Dense Feature Composition

Dat Huynh, Ehsan Elhamifar

NeurIPS20

github

A Shared Multi-Attention Framework for Multi-Label Zero-Shot Learning (Top 5% Paper) CVPR20

Dat Huynh, Ehsan Elhamifar

github

Fine-Grained Generalized Zero-Shot Learning via Dense Attribute-Based Attention

Dat Huynh, Ehsan Elhamifar

CVPR20

github

Self-Supervised Multi-Task Procedure Learning from Instructional Videos

Ehsan Elhamifar, Dat Huynh

ECCV20

github

Achievements

J.P. Morgan Fellowship

2021

- \$100k funding for A.I. research in financial applications (awarded to 15 individuals worldwide).

Adobe Code Quality Jam - Research Grand Champion Award

Aug. 2021

- Selected by Adobe Research Panel for best software engineering practices and effective collaboration.

Northeastern Graduate Fellowship

2017 – 2018

- \$70k stipend for incoming PhD students.