Khoi Nguyen

Ph.D. in Computer Science

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Ⓖ Google Scholar

🏠 http://khoinguyen.org/

Research interests: 3D Reconstruction, Segmentation, Few-shot Learning, and Unsupervised/Self-supervised Learning

EMPLOYMENT

Jul 2021 – Now

Research Scientist
VinAI Research

Sep 2021 – Jun 2021

Research Assistant
Oregon State University

EDUCATION

Sep 2017 – Jun 2021

Doctor of Philosophy in Computer Science
Oregon State University, Corvallis, OR, USA
- Thesis: "Part-based and Uncertainty-Aware Few-shot Object Segmentation in Images"
- Advisor: Prof. Sinisa Todorovic

Sep 2015 – Sep 2017

Master of Science in Computer Science
Oregon State University, Corvallis, OR, USA
- Thesis: "Relational Networks for Visual Relationship Detection",
- Advisor: Prof. Sinisa Todorovic (GPA 3.73/4)

Sep 2009 – Apr 2014

Bachelors's degree in Computer Science
Bach Khoa University (HCMUT), HCMC, Vietnam
- Thesis: "Entity Disambiguation System based on Wikipedia", advisor: Prof. Tru Cao
- Top-5 student in Computer Science Program (total 330 students), (GPA 8.51/10)

STUDENT ADVISING

Current AI residents
- Nguyen Truong Hai, March 2022 - now, **Visual Odometry and SLAM**, VinAI Research
- Ngo Duc Tuan, Aug 2021 - now, **3D Detection and Segmentation**, VinAI Research
- Pham Hai Chau, Aug 2021 - now, **3D Reconstruction and View Synthesis**, VinAI Research

Graduated AI residents
- Nguyen Van Thanh, Aug 2021 - Feb 2022, **Few-shot Object Counting and Detection**, VinAI Research

PUBLICATIONS

Conference papers

- Khoi Nguyen, Sinisa Todorovic, **iFS-RCNN: An Incremental Few-shot Instance Segmenter**, in *Computer Vision and Pattern Recognition (CVPR)*, 2022
- Duong Le, Khoi D. Nguyen, Khoi Nguyen, Quoc-Huy Tran, Rang Nguyen, Binh-Son Hua, **POODLE: Improving Few-shot Learning via Penalizing Out-of-Distribution Samples**, in *Advances in Neural Information Processing Systems (NeurIPS)*, 2021
- Khoi Nguyen, Sinisa Todorovic, **A Weakly Supervised Amodal Segmenter with Boundary Uncertainty Estimation**, in *International Conference on Computer Vision (ICCV)*, 2021
- Khoi Nguyen, Sinisa Todorovic, **FAPIS: A Few-shot Anchor-free Part-based Instance Segmenter**, in *Computer Vision and Pattern Recognition (CVPR)*, 2021
- Khoi Nguyen, Sinisa Todorovic, **A Self-supervised GAN for Unsupervised Few-shot Object Recognition**, in *International Conference on Pattern Recognition (ICPR)*, 2020
- Khoi Nguyen, Sinisa Todorovic, **Feature Weighting and Boosting for Few-Shot Segmentation**, in *International Conference on Computer Vision (ICCV)*, 2019

Patents
- Khoi Nguyen, Maneesh Kumar Singh, **Computer Vision Systems and Methods for Information Extraction from Text Images Using Evidence Grounding Techniques**, in *US Patent*, 2021

PROFESSIONAL ACTIVITIES

Conference Reviewer
- ICLR 2022
- WACV 2022
- ICCV 2021
- CVPR 2021, 2022
- AAAI 2021
- ECCV 2020, 2022

Journal Reviewer TPAMI, TIP

EXPERIENCE

Jun 2019 - Sep 2019

Research Intern
AIBee US Corp - Palo Alto, CA, USA
- Multi-person Tracking by Segmentation in Surveillance Camera
- Mentor: Dr. Chunhui Gu, Dr. Sinisa Todorovic, Dr. Silvio Savarese

Jun 2018 - Sep 2018

Research Intern
Verisk Analytics - the AI Innovation Lab, Jersey City, New Jersey, USA
- Apply Graph Neural Network to image document analysis for extracting semi-structured information (W2 Form)
- Mentor: Dr. Maneesh Singh

ADDITIONAL INFORMATION

References References upon request

Awards/Scholarships
- Outstanding Reviewer Award, ECCV 2020
- Vietnam Education Foundation (VEF) Fellowship (Cohort 2015)