# 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

## PROFESSIONAL ACTIVITIES

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

**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)