Ahmed Abdelreheem ahmed.abdelreheem@kaust.edu.sa

Deep Learning Researcher, PhD Candidate

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'⊕ https://samir55.github.io/
⊕ Samir55
in aabdelreheem95

Education

- 05/2022 **PhD in Computer Science**, *King Abdullah University of Science and Technology* Present (KAUST), Thuwal, Saudi Arabia, Advisor: Prof. Peter Wonka.
- 03/2020 **MS in Computer Science**, *King Abdullah University of Science and Technology* 05/2022 (*KAUST*), Thuwal, Saudi Arabia, Advisor: Prof. Peter Wonka.
- 09/2015 **BSc in Computer Engineering**, *Cairo University*, Cairo, Egypt, GPA: 3.71/4.0, 07/2019 Excellent with Honor.

Experience

- 06/2024 Research Intern, Niantic Labs, London, UK.
- 11/2024 Joined Niantic London Research team working on fine-tuning 3D LLMs, 3D scene understanding, and 3D scene editing. The internship resulted in a filed patent and an ICCV 2025 paper. (Link).
- 06/2022 Research Intern, Snap Inc., Palo Alto, CA, USA.
 - 10/2022 Joined Snap Research (Creative Vision team). Work accepted at WACV 2024. Link.
- 06/2021 **Research Intern**, *Stanford University*, Remote.
 - 08/2021 Joined Guibas Laboratory doing research on improving language-guided 3D scene understanding.
- 09/2019 **Software Engineer**, *eJad*, Cairo, Egypt.
 - 01/2020 Worked in research team on ADAS lane detection; researched road models and vision-based approaches; implemented an initial modular algorithm.
- 02/2019 Research Intern, Valeo, Cairo, Egypt.
 - 05/2019 Improved pedestrian detection using multispectral (thermal and color) image fusion; implemented baseline experiments and ported evaluation metric from Matlab to Python.
- 09/2018 **Software Engineer**, *BlueCloud Technologies*, Cairo, Egypt.
 - 01/2019 Part-time on HR Interview Bot: predicted big five personality traits from video using scene, audio, and face features.
- 05/2017 **Student Developer**, Google Summer of Code, Cairo, Egypt.
 - 08/2017 With BRL-CAD organization: added 3MF file format support in Slic3r; enabled conversions across 3D formats; added Doxygen docs and tests. (C++11)

Workshops

ICCV 2023 Co-organizer: 3rd Workshop on Language for 3D Scenes. Link.

ECCV 2022 Co-organizer: 2nd Workshop on Language for 3D Scenes. Link.

First-Author Publications

- ICCV 2025 PlaceIt3D: Language-Guided Object Placement in Real 3D Scenes.

 Ahmed Abdelreheem, Filippo Aleotti, James Watson, Zawar Qureshi, Abdelrahman Eldesokey, Peter Wonka, Gabriel Brostow, Sara Vicente, Guillermo Garcia-Hernando
- WACV 2024 **ScanEnts3D**: Exploiting Phrase-to-3D-Object Correspondences for Improved Visio-Linguistic Models in 3D Scenes.

 <u>Ahmed Abdelreheem</u>, Kyle Olszewski, Hsin-Ying Lee, Peter Wonka, Panos Achlioptas
- SIGGRAPH Zero-Shot 3D Shape Correspondence.
 - Asia 2023 Ahmed Abdelreheem, Abdelrahman Eldesokey, Maks Ovsjanikov, Peter Wonka
- ICCV 2023 **SATR**: Zero-Shot Semantic Segmentation of 3D Shapes.

 <u>Ahmed Abdelreheem</u>, Ivan Skorokhodov, Maks Ovsjanikov, Peter Wonka
- WACV 2022 **3DRefTransformer**: Fine-Grained Object Identification in Real-World Scenes Using Natural Language.

 Ahmed Abdelreheem, Ujjwal Upadhyay, Ivan Skorokhodov, Rawan Al Yahya, Jun Chen, Mohamed Elhoseiny

Other Publications

- ICCV 2025 **ZeroKey**: Point-Level Reasoning and Zero-Shot 3D Keypoint Detection from Large Language Models.
 - Bingchen Gong, Diego Gomez, Abdullah Hamdi, Abdelrahman Eldesokey, Ahmed Abdelreheem, Peter Wonka, Maks Ovsjanikov
 - TPAMI **3DCoMPaT++**: An improved Large-scale 3D Vision Dataset for Compositional
 - 2025 Recognition.
 - Habib Slim, Xiang Li, Yuchen Li, Mahmoud Ahmed, Mohamed Ayman, Ujjwal Upadhyay, Ahmed Abdelreheem, Arpit Prajapati, Suhail Pothigara, Peter Wonka, Mohamed Elhoseiny
- ECCV 2022 **3DCoMPaT**: Composition of Materials on Parts of 3D Things.
 - (Oral) Ujjwal Upadhyay, Yuchen Li, Habib Slim, Tezuesh Varshney, <u>Ahmed Abdelreheem</u>, Arpit Prajapati, Suhail Pothigara, Peter Wonka, Mohamed Elhoseiny
- ECCV 2020 **ReferIt3D**: Neural Listeners for Fine-Grained 3D Object Identification in Real-World (Oral) Scenes.
 - Panos Achlioptas, Ahmed Abdelreheem, Fei Xia, Mohamed Elhoseiny, Leonidas Guibas

Awards

- 09/2025 ICCV 2025 Doctoral Consortium.
- 08/2023 **Dean's List Award**, *KAUST CEMSE Division*. USD 2,500 award to top students for academic achievements
- 03/2020 KAUST Fellowship, King Abdullah University of Science and Technology.
- 04/2021 ACM Sigmod Programming Contest, 10th place.
- 10/2018 ACM Egyptian Collegiate Programming, 80th/200 place.
- 07/2010 **Egyptian Olympiad in Informatics**, *Bronze Medal*.

Technical Skills

DL PyTorch (proficient), TensorFlow (familiar)

Prog. Lang. Python (proficient), C++ (proficient)
Additional CUDA (familiar)

Academic Service

Reviewer: CVPR 2024 & 2025, ICCV 2023 & 2025, ECCV 2024, SIGGRAPH 2024, SIGGRAPH Asia 2023, 2024 & 2025, 3DV 2024, WACV 2023, 2024 & 2026

Teaching

TA in "CS225: Neural Network Design and Training", taught by Prof. Peter Wonka at KAUST, 09/2025

TA in "CS323: Deep Learning for Visual Computing", taught by Prof. Peter Wonka at KAUST, 09/2023