Nikolaos Sarafianos

 ${\it Email: nikos.sarafianos@gmail.com} Website: nsarafianos.github.io \\ {\it LinkedIn: linkedin.com/in/nsarafianos} Google Scholar: scholar/nsarafianos}$

Experience

• Meta Reality Labs Research, Research Scientist, Sausalito, CA

(06.2019 - Present)

- 3D Generative AI, Dense correspondences, Neural rendering and Synthetic data for 3D humans
- Meta Reality Labs Research, Research Scientist Intern, Sausalito, CA

(05.2018 - 08.2018)

- Generative models for 3D humans
- Amazon, Alexa Machine Learning, Research Scientist Intern, Cambridge, MA

(05.2017 - 08.2017)

- Acoustic event detection

Education

• Ph.D. in Computer Science, University of Houston, Houston, TX

(09.2014 - 05.2019)

- 3D human pose estimation, Visual attribute classification, Text-to-image retrieval
- Diploma in Electrical and Computer Engineering, National Technical University of Athens, Greece (09.2008 10.2013)
 - 5-year studies equivalent to Master

Selected Publications

- 1. Y. Xue, B. Bhatnagar, R. Marin, N. Sarafianos, Y. Xu, G. Pons-Moll, T. Tung "NSF: Neural Surface Fields for Human Modeling from Monocular Depth" ICCV 2023 Webpage
- 2. A. Frühstück, N. Sarafianos, Y. Xu, P. Wonka, T. Tung "VIVE3D: Viewpoint-Independent Video Editing using 3D-Aware GANs" CVPR 2023 Webpage
- 3. G. Tiwari, D. Antic, J. Lenssen, N. Sarafianos, T. Tung. and G. Pons-Moll "Pose-NDF: Modelling Human Pose Manifolds with Neural Distance Fields" ECCV 2022 (Oral, **Best Paper Honorable Mention**) Webpage
- 4. P. Nguyen, **N. Sarafianos**, C. Lassner, J. Heikkila, T. Tung "Free-Viewpoint RGB-D Human Performance Capture and Rendering" ECCV 2022 **Webpage**
- 5. A. Ianina, N. Sarafianos, Y. Xu, I. Rocco, T. Tung "BodyMap: Learning Full-Body Dense Correspondence Map" CVPR 2022 Webpage
- 6. P. Palafox, N. Sarafianos, T. Tung, A. Dai "SPAMs: Structured Implicit Parametric Models" CVPR 2022 Webpage
- 7. G. Tiwari, N. Sarafianos, T. Tung. and G. Pons-Moll "Neural-GIF: Neural Generalized Implicit Functions for Animating People in Clothing" ICCV 2021 Webpage
- 8. B. Chaudhuri, N. Sarafianos, L. Shapiro and T. Tung. "Semi-supervised Synthesis of High-Resolution Editable Textures for 3D Humans" CVPR 2021 Webpage
- 9. N. Sarafianos, X. Xu, and I.A. Kakadiaris. "Adversarial Representation Learning for Text-to-Image Matching" ICCV 2019
- N. Sarafianos, X. Xu and I.A. Kakadiaris. "Deep Imbalanced Attribute Classification using Visual Attention Aggregation" ECCV 2018
- 11. N. Sarafianos, B. Boteanu, B. Ionescu and I.A. Kakadiaris. "3D Human Pose Estimation: A Review of the Literature and Analysis of Covariates" CVIU 2016

Programming Skills

• Proficient: Python, PyTorch

Fluent: C++, Blender

Awards

• Best Paper Honorable Mention at ECCV 2022

(2022)

 $\bullet\,$ 2 Patents filed on novel view synthesis and animatable radiance fields for digital humans

(2020,2022)(2020,2021)

• Outstanding reviewer for ECCV 2020, CVPR 2021, ICCV 2021

Volunteering

(2020-2023)

• Grace Hopper celebration of women in computing

(2016, 2018)

• Girls Who Code instructor

• Deep Learning Indaba Mentor

(09.2016 - 05.2017)

• Houston Food Bank (03.2015)