Marko Mihajlovic

PhD Student in Computer Vision

🔗 markomih.github.io   ⦿ github.com/markomih   G scholar   🏠 Zurich, Switzerland

Education

PhD Computer Science (expected in Sept. 2024)   **ETH Zurich, Switzerland** *2020-2024*
Photo-realistic digitization of dynamic environments and avatars.
Supervisors Prof. Dr. Siyu Tang and Prof. Dr. Marc Pollefeys.

MSs Computer Science   **ETH Zurich, Switzerland** *2018-2020*
Specialization in Visual Computing. Supervisor: Prof. Dr. Marc Pollefeys.

BSc Computer Science   **Faculty of Electronic Engineering, Serbia** *2013-2017*
Valedictorian (1/420 students), GPA 10.0/10.0.

Experience

Research Intern *Meta Reality Labs Research*   **Zurich, Switzerland** *08/2023 - 02/2024*
- I worked on static and dynamic 3D reconstruction with Gaussian Splatting. (*under submission*)
- Managers: Edmond Boyer and Tony Tung

Research Intern *Meta Reality Labs Research*   **Pittsburgh, Pennsylvania** *09/2021 - 04/2022*
- I worked on neural rendering and reconstruction from sparse views.
- Manager: Michael Zollhoefer

Research Assistant *ETH Zurich*   **Zurich, Switzerland** *12/2019 - 03/2020*
- I worked on a robust and privacy-preserving Federated Learning framework.

Software Engineer *Stem Inc. (stem.com)*   **San Francisco, Remote** *07/2018 - 09/2018*
- I developed and deployed a microservice pipeline that processes online data streams and supplies machine learning algorithms.

Software Engineer *ABB Switzerland Ltd. (abb.com)*   **Switzerland, Remote** *03/2018 - 06/2018*
- I worked on an ETL system that prepares data for machine learning algorithms.

Selected Publications (Full List at Google Scholar)

1. **Marko Mihajlovic**, Sergey Prokudin, Marc Pollefeys, and Siyu Tang, "ResFields: Residual neural fields for spatiotemporal signals," In **ICLR (spotlight)**, 2024

2. Xiyi Chen, **Marko Mihajlovic**, Shaofei Wang, Sergey Prokudin, and Siyu Tang, "Morphable Diffusion: 3d-consistent diffusion for single-image avatar creation," In **CVPR**, 2024

3. Zhiyin Qian, Shaofei Wang, **Marko Mihajlovic**, Andreas Geiger, and Siyu Tang, "3DGS-Avatar: Animatable avatars via deformable 3d gaussian splatting," In **CVPR**, 2024

4. Yan Zhang, Sergey Prokudin, **Marko Mihajlovic**, Qianli Ma, and Siyu Tang, "Degree-of-freedom matters: Inferring dynamics from point trajectories," In **CVPR**, 2024

5. **Marko Mihajlovic**, Aayush Bansal, Michael Zollhoefer, Siyu Tang, and Shunsuke Saito, "KeypointNeRF: Generalizing image-based volumetric avatars using relative spatial encoding of keypoints," In **ECCV**, 2022

6. **Marko Mihajlovic**, Shunsuke Saito, Aayush Bansal, Michael Zollhoefer, and Siyu Tang, "COAP: Compositional articulated occupancy of people," In **CVPR**, 2022

7. Shaofei Wang, **Marko Mihajlovic**, Qianli Ma, Andreas Geiger, and Siyu Tang, "MetaAvatar: Learning animatable clothed human models from few depth images," In **NeurIPS**, 2021

8. **Marko Mihajlovic**, Yan Zhang, Michael J. Black, and Siyu Tang, "LEAP: Learning articulated occupancy of people," In **CVPR**, 2021

9. **Marko Mihajlovic**, Silvan Weder, Marc Pollefeys, and Martin R. Oswald, "DeepSurfels: Learning online appearance fusion," In **CVPR**, 2021