

MARIA KOROSTELEVA

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EDUCATION

Doctor of Philosophy

Korea Advanced Institute of Science and Technology (KAIST)

Specialization: Computer Graphics; Advisor: Sung-Hee Lee

Feb. 2018–Aug. 2022

Daejeon, South Korea

Specialist in Mathematics and System Programming

Lomonosov Moscow State University (MSU)

Graduated with Honors (GPA 4.0)

Specialization: Information Security; Advisor: Dennis Gamayunov

Sept. 2010–Jun. 2015

Moscow, Russia

PUBLICATIONS

- Qi, A., Pietroni, N., **Korosteleva, M.**, Sorkine-Hornung, O. and Bousseau, A. (2025). Rags2Riches: Computational Garment Reuse. *SIGGRAPH 2025 (Conference track)* [[Project Page](#)][[GitHub](#)]
- Nakayama, K., Ackermann, J., Kesdogan, T. L., Zheng, Y., **Korosteleva, M.**, Sorkine-Hornung, O., Guibas, J. L., Yang, G. and Wetzstein G. (2025). AIpparel: A Large Multimodal Generative Model for Digital Garments. *CVPR 2025* [[Project Page](#)] [[ArXiv](#)][[Dataset](#)][[GitHub](#)]
- **Korosteleva, M.**, Kesdogan, T. L., Kemper, F., Wenninger, S., Koller, J., Zhang, Y., Botsch, M., and Sorkine-Hornung, O. (2024). GarmentCodeData: A Dataset of 3D Made-to-Measure Garments With Sewing Patterns. *ECCV 2024* [[Project Page](#)] [[Dataset](#)]
- **Korosteleva, M.** and Sorkine-Hornung, O. (2023) GarmentCode: Programming Parametric Sewing Patterns. *ACM Trans. on Graph., Volume 42, Issue 6* [[Project Page](#)] [[Demo](#)] [[GitHub](#)] [SIGGRAPH Asia 2023, Journal Track]
- **Korosteleva, M.** and Lee, S.-H. (2022) NeuralTailor: Reconstructing Sewing Pattern Structures from 3D Point Clouds of Garments. *ACM Trans. on Graph., Volume 41, Issue 4* [[Arxiv](#)] [[ACM DL](#)] [[GitHub](#)] [SIGGRAPH 2022, Journal Track]
- **Korosteleva, M.** and Lee, S.-H. (2021), Generating Datasets of 3D Garments with Sewing Patterns. *NeurIPS 2021 Datasets and Benchmarks Track* [[OpenReview](#)] [[Dataset](#)] [[GitHub](#)]
- Bang, S., **Korosteleva, M.** and Lee, S.-H. (2021), Estimating Garment Patterns from Static Scan Data. *Computer Graphics Forum*. [[Paper](#)][[GitHub for my contribution](#)]

EXPERIENCE

Research Engineer

Epic Games

From Feb. 2025

Remote, Germany

- Continuation of previous role – after Meshcapade team joined Epic
- Automated apparel design at scale for synthetic data generation

Computer Graphics Scientist

Meshcapade GmbH

Oct. 2024–Feb. 2025

Remote, Germany

- Oct. 2024–Dec. 2024 as freelancer, from Feb. 2025 full time employemnt
- Automated apparel design at scale for synthetic data generation
- MS Thesis supervision at ETH Zurich, FittedGenes, sewing pattern nesting with domain-aware constraints

Postdoctoral Researcher*IGL at ETH Zurich*

Sept. 2022–Sept. 2024

Zurich, Switzerland

- In collaboration with Prof. Dr. Olga Sorkine-Hornung
- Working on an advanced 3D garment modeling system
- Teaching duties: TA for Linear Algebra, Shape Modeling; Supervision of Semester projects and a Bachelor thesis

Research Assistant*Lifelike Avatar & Agent Lab, KAIST*

Feb. 2018–Aug. 2022

Daejeon, South Korea

- Contributing to the Lab research projects on realistic virtual avatars for humans
- Utilized numerical optimization and Deep Learning methods for 3D shape analysis.

Research Intern at Reality Labs Research*Meta Platforms, Inc.*

Aug. 2021–Dec. 2021

Remote, UK

- Formulated and implemented an innovative solution for segmentation of 3D volumetric data using Deep Learning-based CV methods; Suggested and implemented novel evaluation metrics.
- Started with minimal experience in CV but finished with the model that produces highly accurate segmentation results.
- Clearly presented my ideas and results to the teams of diverse backgrounds (HW, SW, AI).

Student Lab Manager*Lifelike Avatar & Agent Lab, KAIST*

Feb. 2021–Aug. 2021

Daejeon, South Korea

- Initialed and prepared the launch of Lab internal portal for sharing knowledge, policy, events, and equipment information.

Tester (QA Specialist) at Backend core and call-center tools team**Senior Tester from May 2017***Tutu.ru, online travel agency*

Oct. 2015–Feb. 2018

Moscow, Russia

- Helped to develop critical projects; trained newcomers; developed and supported autotests.
- Received an early promotion to the Senior Tester position as a recognition of my achievements.

SKILLS

Methodologies	Deep Learning; Numerical Optimization; XPBD cloth simulation
Programming Languages	Python; C++;
Libraries	NVidia Warp; PyTorch; libigl; Ceres-solver; OpenGL; OpenPose;
APIs	Qualoth API; Maya Python API;
Models	SMPL

COMMUNITY SERVICE**Invited Talks**

From 2023

- ETH Orientation Days, representing D-INFK (Sept 2024)
- NACHTAKTIV “SCIENCE CATWALK” (Nov 2023)
- Workshop - Computer Science for Girls (Sept 2023)

Reviewer

From 2022

- ACM SIGGRAPH (2026)
- ACM SIGGRAPH (2025)
- SIGGRAPH Asia (2024)

- ACM SIGGRAPH (2024)
- Eurographics (2024)
- IEEE TVCG (2023-2026)
- ACM SIGGRAPH (2023)
- Computer Graphics Forum (2022-2023)
- NeurIPS Datasets and Benchmarks Track (2023)

Volunteer

2019-2022

- WiGRAPH 2022
- SIGGRAPH 2021
- SIGGRAPH Asia 2020
- Symposium on Computer Animation (SCA) 2019

HONORS AND AWARDS

CLO Award

2022

KCGS

South Korea

- CLO Virtual Fashion Inc. awards a distinguished paper on virtual garments presented during the Korean Computer Graphics Society Conference
- Awarded for the NeuralTailor project.

Special Ph.D. Scholarship

2018-2022

KAIST

South Korea

- Received it as an outstanding student by recommendation by Department Head.
- Awarded for the duration of the Ph.D. program.

KAIST Scholarship for International Students

2018-2022

KAIST

South Korea

- Covering tuition fees for the duration of the program for the high profile admission portfolio.

Ist place at young scientists competition "Young School"

May 2014

Positive Hack Days IV

Moscow, Russia

- For the research project "Enabling Deniable Encrypted Group Communication."

Special Scholarship for outstanding students

2013-2015

Lomonosov Moscow State University (MSU)

Moscow, Russia

- Awarded for high educational achievements (GPA 4.0, top 2% of student) throughout the educational course.
- Renewed every semester.

Government sponsorship of tuition

2010-2015

Lomonosov Moscow State University (MSU)

Moscow, Russia

- Provided for pursuing a degree in a critical field (Computer Science) for my high results on the State Examination for High School students.

HOBBIES

Ballroom Dancing and Travel