

# MARIA KOROSTELEVA

[GitHub](#) ◇ [LinkedIn](#) ◇ [Google Scholar](#) ◇ [maria.korosteleva@inf.ethz.com](mailto:maria.korosteleva@inf.ethz.com)



## EDUCATION

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### 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

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- **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*. [[Link](#)][[GitHub for my contribution](#)]

## EXPERIENCE

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### Postdoctoral Researcher

*IGL at ETH Zurich*

From Sept. 2022

*Switzerland*

- In collaboration with Prof. Dr. Olga Sorkine-Hornung

### 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

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<b>Methodologies</b>	Deep Learning; Numerical Optimization;
<b>Programming Languages</b>	Python; C++;
<b>Libraries</b>	PyTorch; libigl; Ceres-solver; OpenGL; OpenPose;
<b>APIs</b>	Qualoth API; Maya Python API;
<b>Models</b>	<a href="#">SMPL</a>

## HONORS AND AWARDS

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<b>CLO Award</b>	2022
<i>KCGS</i>	<i>South Korea</i>

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

<b>Special Ph.D. Scholarship</b>	2018-2022
<i>KAIST</i>	<i>South Korea</i>

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

<b>KAIST Scholarship for International Students</b>	2018-2022
<i>KAIST</i>	<i>South Korea</i>

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

<b>1st place at young scientists competition "Young School"</b>	May 2014
<i>Positive Hack Days IV</i>	<i>Moscow, Russia</i>

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

<b>Special Scholarship for outstanding students</b>	2013-2015
<i>Lomonosov Moscow State University (MSU)</i>	<i>Moscow, Russia</i>

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

<b>Government sponsorship of tuition</b>	2010-2015
<i>Lomonosov Moscow State University (MSU)</i>	<i>Moscow, Russia</i>

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

## COMMUNITY SERVICE

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<b>Reviewer</b>	From 2022
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- NeurIPS Datasets and Benchmarks Track 2023

<b>Student Volunteer at SIGGRAPH Asia 2020, SIGGRAPH 2021</b>	2020-2021
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- Moderation of the chat rooms during the Live talks for questions from attendees and Code of Conduct violations.

### **Student Volunteer at Symposium on Computer Animation (SCA) 2019**

2019

- Registration of the attendees of the conference and providing information support.
- Helping speakers with pre-presentation technical checks.

### **Math classes for kids from orphanage**

2014-2015

*Center of Equal Opportunities "Vverh"*

*Moscow, Russia*

- Providing additional individual instructions in mathematics for students from remote areas – exam preparation and clearing up misunderstood areas.

### **Student Events Organizer**

2012-2015

*Lomonosov Moscow State University*

*Moscow, Russia*

- Organized a variety of events for fellow students from small scale cinema visits as single organizer, to graduation party (100 attendees) and graduation ceremony (over 400 attendees) as part of small organizing team (3 people).

### **Event Volunteer at Olimpic Games**

2014

*Sochi Winter Olympics*

*Sochi, Russia*

- Welcoming passengers and providing help on the transportation hub.
- Answering gazillion of questions for transportation, event schedule, and local sights (with a smile =))

## **HOBBIES**

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Ballroom Dancing, Travel, and Psychology.