MARIA KOROSTELEVA



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EDUCATION

Doctor of Philosophy

Feb. 2018–Aug. 2022

Korea Advanced Institute of Science and Technology (KAIST)

Daejeon, South Korea

Specialization: Computer Graphics; Advisor: Sung-Hee Lee

Specialist in Mathematics and System Programming

Sept. 2010–Jun. 2015 Moscow, Russia

Lomonosov Moscow State University (MSU)

Graduated with Honors (GPA 4.0)

Specialization: Information Security; Advisor: Dennis Gamayunov

PUBLICATIONS

- · 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

Postdoctoral Researcher

From Sept. 2022

IGL at ETH Zurich

Switzerland

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

Research Assistant

Feb. 2018–Aug. 2022

Lifelike Avatar & Agent Lab, KAIST

Daejeon, South Korea

- \cdot 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

Aug. 2021–Dec. 2021

Remote, UK

Meta Platforms, Inc.

- · 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

Feb. 2021–Aug. 2021

Lifelike Avatar & Agent Lab, KAIST

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;

Programming Languages Python; C++;

Libraries PyTorch; libigl; Ceres-solver; OpenGL; OpenPose;

APIs Qualoth API; Maya Python API;

Models SMPL

HONORS AND AWARDS

CLO Award

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.

COMMUNITY SERVICE

Reviewer From 2022

 \cdot NeurIPS Datasets and Benchmarks Track 2023

Student Volunteer at SIGGRAPH Asia 2020, SIGGRAPH 2021

· 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 Olympic 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

Ballroom Dancing, Travel, and Phsychology.