

PARITOSH SHARMA

GRAD STUDENT

Université Paris Saclay - CNRS

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Publications

PUBLISHED

Paritosh Sharma and Michael Filhol. "Multi-Track Bottom-Up Synthesis from Non-Flattened AZee Scores". In: *7th Workshop on Sign Language Translation and Avatar Technology: The Junction of the Visual & the Textual Challenges and Perspectives (SLTAT 7)*. Marseille, France, June 2022. URL: <https://hal.archives-ouvertes.fr/hal-03721720>

Paritosh Sharma. "A Layered Approach to Constrain Signing Avatars". In: *VISIGRAPP_DC 2023*. Scitevents. Lisbon, Portugal, Feb. 2023. URL: <https://hal.science/hal-04143663>

Paritosh Sharma and Michael Filhol. "Extending Morphs in AZee Using Pose Space Deformations". In: *2023 IEEE International Conference on Acoustics, Speech, and Signal Processing Workshops (ICASSPW)*. 2023, pp. 1–5. DOI: [10.1109/ICASSPW59220.2023.10193413](https://doi.org/10.1109/ICASSPW59220.2023.10193413)

Paritosh Sharma and Michael Filhol. "Intermediate Block Generation for Multi-Track Sign Language Synthesis". In: *Proceedings of the ACM SIGGRAPH/Eurographics Symposium on Computer Animation*. SCA '23. Los Angeles, CA, USA: Association for Computing Machinery, 2023. ISBN: 9798400702686. DOI: [10.1145/3606037.3606837](https://doi.org/10.1145/3606037.3606837). URL: <https://doi.org/10.1145/3606037.3606837>

Teaching

Polytech Paris Sud	Introduction to Computer Graphics , Teaching Assistant	Spring 2023
Polytech Paris Sud	Interaction Humain-Machine(French) , Teaching Assistant	Spring 2023
Polytech Paris Sud	Introduction aux bases de données(French) , Teaching Assistant	Spring 2023
IUT d'Orsay	Informatique Graphique pour la Science des Données(French) , Teaching Assistant	Spring 2023
IUT d'Orsay	Introduction à l'Intelligence Artificielle(French) , Teaching Assistant	Spring 2023
IUT d'Orsay	Informatique Graphique pour la Science des Données(French) , Teaching Assistant	Spring 2022
IUT d'Orsay	Introduction à la Programmation orientée Objet(French) , Teaching Assistant	Fall 2021

Projects

- WebGL demonstration for Mass Spring Systems using popular algorithms like Euler methods, Verlet Integration, etc.
- 3D Underwater scene in PyOpenGL and GLSL.
- Galactic Cricket - A VR cricket game for Meta headsets
- Oh Camel! - A MinCaml compiler

Education

Université Paris-Saclay - CNRS

Orsay, France

PHD

2021 - Present

- Thesis on the synthesis of Sign Language from AZee expressions
- Director: Dr. Michael Filhol

Université Grenoble Alpes - ENSIMAG

MS INFORMATICS

- Specialization in Graphics, Vision and Robotics
- M1 Thesis in interaction methods for eye tracking under Dr. Didier Schwab
- M2 Thesis in synthesis of sign language under Dr. Michael Filhol

Grenoble, France

2019 - 2021

SRM University

B.TECH. CSE

- Final year project in Finger Tracking under Mrs. Priyanka Sharma

Ghaziabad, India

2015 - 2019

Professional Experience

- Nov. 2018 - Apr. 2019 **Intern**, Gesture Research
- May 2018 - Aug. 2018 **Student Developer**, Godot - Google Summer of Code
- Dec. 2017 - Jan. 2018 **Intern**, Cusmat Technologies

Skills

COMPUTER GRAPHICS

Armature animation, Kinematics, Physics-based animation(Rigid and Soft body simulation), Path tracing, noise functions, BRDF and micro-facet theory,

MATHEMATICS

Linear algebra, Multi-variable Calculus, Euler Integration, Optimization(gradient descent and back-propagation), sampling and Monte Carlo estimators.

COMPUTER SCIENCE

C++, OpenGL, GLSL, Blender, Unity3D, Godot, multi-threading, Python, Octave, Tensorflow, Java, HTML, CSS, JS(phasor.js), Git, Linux, Qt, CMake, Latex, Inkscape, GIMP and iMovie.

LANGUAGES

English(professional), Hindi(native), French(Professional), French Sign Language(A1.2)

Additional Information

TALKS

- 2023 **3MT - 3 Minute Thesis**, Sign Language Synthesis in 3 minutes Orsay, France
- 2020 **KDE Akademy 2020**, Qt3D backend for KStars Online

PEER REVIEW

Reviewer and Program Committee member for 8th Workshop on Sign Language Translation and Avatar Technology: The Junction of the Visual and the Textual Challenges and Perspectives (SLTAT 8) - ICASSP 2023

HONORS

- 2023 **Doctoral Consortium - VISIGRAPP 2023**, Best PhD project Portugal
- 2020 **EIT Health - Grenoble i-Days 2020**, Bronze Medal France
- 2020 **Campus France**, Charpak BCS Master's Scholarship
- 2011 **17th UCMAS Abacus and Mental Arithmetic International Competiton**, 1st Runner Up Malaysia
- 2014 **Technothon, IIT Guwahati**, All India Rank 44 India

OTHER WORK

Present **La Petite Rockette**, Volunteer

Paris, France

2020 **Association de la fondation étudiante pour la ville**, Volunteer

Grenoble,

France

2020 **INTEGRE**, Vice President - Events

Grenoble,

France

2018 **Robinhood Army**, Volunteering and teaching at local slums

India

OTHER INTERESTS

Cycling, Climbing, Hiking, Cooking, Chess