

PARITOSH SHARMA

GRAD STUDENT

Université Grenoble Alpes - ENSIMAG

+33 751044970 | contact@paritosh-sharma.com | www.paritosh-sharma.com | Paritosh97 | paritosh.sharma79

Research

Laboratoire d'Informatique de Grenoble - TEAM GETALP

Grenoble, France

ADVISOR: DR. DIDIER SCHWAB

Feb. 2020 - Sept. 2020

- Thesis: "Interaction methods for eye tracking in games for cognitively disabled people"

Projects

Personal

Gurgaon, India

SIMULATOR FOR MASS SPRING SYSTEMS

Dec. 2018

- WebGL demonstration for Mass Spring Systems using popular algorithms like Implicit/Explicit Euler, Verlet Integration, etc.

KDE

Grenoble, France

QT3D BACKEND FOR KSTARS

May 2020 - Jul. 2020

- 3D backend for planetarium software KStars
- Support for Astronomical projections

Education

Université Grenoble Alpes - ENSIMAG

Grenoble, France

MS INFORMATICS

2019 - 2021

- Specialization in Graphics, Vision and Robotics
- M1 Thesis in interaction methods for eye tracking

SRM University

Ghaziabad, India

B.TECH. CSE

2015 - 2019

- Thesis in Finger Tracking
- Advisor: Mrs. Priyanka Sharma

Professional Experience

Nov. 2018 -

Intern, Gesture Research

Apr. 2019

May 2018 -

Student Developer, Godot - Google Summer of Code

Aug. 2018

Dec. 2017 -

Intern, Cusmat Technologies

Jan. 2018

Skills

COMPUTER GRAPHICS

Physics based simulation(Inverse Kinematics, Verlet Integration), Path tracing, importance sampling, BRDF and microfacet theory, differentiable rendering and noise functions(worley, perlin).

MATHEMATICS

Linear algebra, Multivariable Calculus, optimization(gradient descent and backpropagation), sampling and Monte Carlo estimators.

COMPUTER SCIENCE

C++, OpenGL, GLSL, Unity3D, multi-threading, CUDA, Python, Matlab/Octave, Tensorflow, Java, HTML, CSS, JS(jquery and phaser.js), Git, Linux, Qt, CMake, automatic differentiation, scalable algorithms, Inkscape, GIMP and OpenShot.

LANGUAGE

English and Hindi(native), French(Beginner)

Additional Information

INVITED TALKS

Summer 2020. *Qt3D backend for KStars*. Invited talk: KDE Academy 2020

HONORS

- 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

- 2018 **Robinhood Army**, Volunteering and teaching at local slums *India*
- 2020 **Association de la fondation étudiante pour la ville**, Volunteer *France*
- 2020 **INTEGRE**, Organizer for Integration Events *France*

OTHER INTERESTS

Hiking, Climbing, Soccer, Chess, Shogi, History of digital and board games