NOLAN MESTRES

PhD in Computer Science

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+33 6 59 02 87 85

SKILLS

GLSL

OpenGL

Gratin

Unreal Engine

LaTeX

C / C++

Python, MATLAB

Linux systems

LANGUAGES

French, native (C2)

English, fluent (C1)

Japanese, intermediate (B1)

WORKING EXPERIENCE

Research & Development (Post-Doc) Jan. 2023 - present

Grenoble INP, then INRIA

Transfer of my thesis research work to micmap, a start-up for the real-time visualization of data on 3D landscapes, and development of its rendering engine.

PhD Candidate in Computer Graphics 2019-2022

Maverick, LJK, Grenoble, France

Taking hand-painted panorama maps as a case-study, my goal was to provide artists with novel lighting tools to enhance our perception of physical properties (shape, depth) in rendered images.

Computer Graphics Engineer 2019

Absolute Software, Hamburg, Germany

I worked on a VR application for the employees of the Hamburg Port Authority using Unreal Engine. I also worked on networking and visualization features.

Research Engineer Internship 2018

National Institute of Informatics, Tokyo, Japan

I studied the rendering of fluorescence under the supervision of Imari Sato and developped a spectral path tracer.

EDUCATION

PhD in Computer Science 2019-2022, grad.

Grenoble Alpes University, France

MSc in Computer Science (Computer Graphics) 2016-2018, grad.

Toulouse III - Paul Sabatier University, France

AGH University of Science & Technology, Poland

BSc in Computer Science 2014-2016, grad.

Toulouse III - Paul Sabatier University, France

Technical Degree in Computer Science 2013-2014, grad.

Toulouse III - Paul Sabatier University, France

BA in Japanese Language, Literature, and Foreign Civilization 2010-2013, 3rd year

Toulouse II - Le Mirail University, France

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PUBLICATIONS

Journal Articles

A Stylistic Study of the Hand-Painted Winter Panorama Maps of Pierre Novat 2022

Nolan Mestres
Cartographic Perspectives, 10.14714/CP100.1753

Local Light Alignment for Multi-Scale Shape Depiction 2021

Nolan Mestres, Romain Vergne, Camille Noûs, Joëlle Thollot
Computer Graphics Forum, Eurographics, 10.1111/cgf.142656

Posters

Controllable Lighting Model for Designing Digital Panorama Maps in the Style of Novat 2023

Nolan Mestres, Romain Vergne, Joëlle Thollot, Arthur Novat
ICA 12th Mountain Cartography Workshop, Colorado, USA

Thesis

Light Manipulation for an Expressive Depiction of Shape and Depth: Drawing on Pierre Novat's Hand-Painted Mountain Panoramas 2022

Nolan Mestres
HAL : tel-03902130

TEACHING

Algorithmics & Functional Programming 2020

To 1st years of BSc in Computer Science

SUPERVISED STUDENTS

Master's degree

Antoine Richermoz 2022

Rendering of Forests in Panorama Maps
Co-Supervised with Romain Vergne, Joëlle Thollot, and Fabrice Neyret

Oumayma Boulmane 2022

Terrain Deformation for the Creation of Stylized Panorama Maps
Co-Supervised with Romain Vergne, Joëlle Thollot, and Fabrice Neyret

Nathan Rebiscoul 2022

Stylized Rendering of Cartographic Vector Data for 3D Maps
Co-Supervised with Romain Vergne, Joëlle Thollot and Fabrice Neyret

Anita Granizo 2021

Shading and Shadowing in Panorama Maps
Co-Supervised with Romain Vergne and Joëlle Thollot