



Emile BARBIER--RENARD,

PhD in signal and image processing

Looking for a postdoctoral position
in SAR 3D reconstruction

EXPERIENCES

CONTACTS

✉ contact@barbierrenard.fr
☎ +33 6 51 86 61 19

CERTIFICATIONS

Fraunhofer FHR
International Summer School
on Radar/SAR

Nvidia
Fundamentals of Accelerated
Computing with CUDA Python

LANGUAGES

French • Native
English • C1
Spanish • A2
Italian • A2

HOBBIES

Dance
Rock n' Roll, Lindy Hop,
Jazz Roots, anything
that swings!

Cello
Training in Reims
Conservatory
(2006-2016) then
independent practice

2022-2025

Télécom Paris • PhD student • 3 years, ongoing
Multi-view 3D reconstruction in SAR imaging using
inverse rendering [Python, Pytorch, Cuda]

- "Reconstruction 3D depuis des couples SAR ascendant/descendant,"
30e Colloque sur le traitement du signal et des images, 2025
- "Multiview 3-D Surface Reconstruction From SAR Images by Inverse Rendering,"
IEEE Geosci. Remote Sens. Lett. 2025, DOI: 10.1109/LGRS.2025.3572303
- PhD students representative in laboratory and school councils

2022

Laboratoire Hubert Curien • Intern • 6 months
Segmentation of copy detection patterns with morphological
neural networks [Python, Tensorflow]

- "Logarithmic Morphological Neural Nets robust to lighting variations,"
co-author, DGMM 2022, DOI: 10.1007/978-3-031-19897-7_36

2021

Technodigit • Intern • 2 months

Prototyping surface rendering (splatting) for large
point clouds [C++, GLSL]

FORMATIONS

2022-2025

PhD • Institut Polytechnique de Paris doctoral school

2021-2022

Master's degree • Université Jean-Monnet

"Advanced Imaging & Material Appearance" • Highest honours [Matlab]

2019-2022

Engineering degree • Télécom Saint-Etienne

Imaging and Computer Science [Python, Matlab, C++, JavaScript, Java]

- "WIKIPEDIA — Category X, Degree Y," art piece for Biennale Internationale du Design
de Saint-Etienne 2021 (delayed until 2022) [Python, JavaScript, NodeJS]

PERSONAL PROJECT: MetroLag



Real life competitive "capture the flags" game using public transports,
assisted by a custom website and server [NodeJS, JavaScript]
metrolag.barbierrenard.fr