



Emile BARBIER--RENDAR, PhD in signal and image processing

Looking for a postdoctoral position
in SAR 3D reconstruction

EXPERIENCES

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](#)]

CONTACTS

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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
independant practice

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](#)]

See more on my personal webpage

Academic publications



Personal projects

emile.barbierrenard.fr

