



**SELECTION PROCEDURE FOR POSTDOCTORAL RESEARCH STAFF
CONTRACTED USING EXTERNAL FUNDING
FOR SPECIFIC PURPOSES OR UNIVERSITY OF BARCELONA POLICY FUNDING**

APPENDIX TO THE CONDITIONS OF THE CALL FOR APPLICATIONS

GENERAL DETAILS

Subject	Postdoc on Bayesian Monte Carlo for Photo-Realistic Rendering
Functions	The selected candidate will contribute to investigate and develop efficient solutions to generalize the application Bayesian Monte Carlo to Physically-based Rendering. The work will be developed within the context of a Research Consolidation grant (09/2023 to 08/2025) awarded to Dr. Ricardo Marques by the Spanish Research Agency AEI, and will be carried on within the Department of Mathematics and Informatics of the University of Barcelona, a multidisciplinary and extremely dynamic research environment. The selected candidate will have the opportunity collaborate with a PhD Student on the topic of Bayesian Monte Carlo, currently supervised by Dr. Ricardo Marques at University Pompeu Fabra, as well as to benefit from the national and international research collaborations of Dr. Ricardo Marques. For further inquiries please contact Dr. Ricardo Marques (ricardo.marques@ub.edu).
Type of funding and funding body	Research project Advanced Bayesian Monte Carlo Techniques for Photo Realistic Rendering (Ref: CNS2022-135480) of the Spanish AEI (call Consolidación Investigadora 2022 financed through NextGenerationEU)
Recipient	Department of Mathematics and Informatics
Duration of contract	1 year and 6 months
Possibility of extension	No
Start date and maximum period before starting work	March, 2024
Time commitment	Full time
Gross salary per annum (without social security payments)	29.100,00 €



Period for submission of applications	10 working days
Period for accepting the contract offer	Offers must be accepted within ten working days
Website or email address for formalizing the application	Applications should be sent with the corresponding documents to: ricardo.marques@ub.edu (PI) oag.mates.inform@ub.edu (OAG) The title of the email should be: Postdoc application - BMC for Rendering – NAME OF THE CANDIDATE
Sources of recruitment	The job will be posted on the UB E-Office and on Euraxess.
CANDIDATE REQUIREMENTS	
Requirements	Candidates must hold a PhD in computer science, physics, mathematics, or in a related discipline, and have a strong publication record in their respective field. A solid mathematical background is required, as well as good programming skills in C++, Python and/or Matlab. Experience in Rendering techniques and/or Machine Learning is highly valued. Experience with Monte Carlo methods is also a plus.
Documentation required	<ul style="list-style-type: none">• CV• Motivation letter or Research statement
	<ul style="list-style-type: none">• 1 or 2 reference letters to be sent separately to the same email addresses, by the professor who writes the letter
SELECTION PROCESS	
Selection criteria and weighting (criteria to be taken into account in the assessing candidates, and weighting of each criterion on a scale of 0-100).	<ul style="list-style-type: none">• Suitability of CV (max. 50)<ul style="list-style-type: none">▪ Publications or preprints in Photo-Realistic Rendering, Monte Carlo Methods, Machine Learning or other topics closely related to the project (40)▪ Other merits (10)• Motivation letter or Research statement (max. 30)• PhD in one of the required areas (max. 20).



Minimum score to pass the selection process	60
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