



# Research Engineer (IRIT-University of Toulouse)

Job Type: Software development  
Location: IRIT Laboratory, Toulouse, France,  
Starting date: from April to September  
Duration: 18 months  
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## Overview of the hosting structure

The STORM research group at IRIT develops its activities in the field of Computer Graphics; it is composed by 4 permanent researchers, 10 PhD students and postdocs, 2 engineers. From geometric modelling to realistic rendering, the group aims at developing computationally efficient models and tools for digital content creation and edition.

STORM is hosted at IRIT (Institut de Recherche en Informatique de Toulouse – Informatics Research Institute of Toulouse), one of the major potential of the French research in computer science, with a workforce of more than 700 members including 272 researchers and teachers 204 PhD students, 50 post-doc and researchers under contract and also 32 engineers and administrative employees.

## Job Description

Nicolas Mellado, David Vanderhaeghe and their colleagues published last year at Siggraph a method for the constrained exploration of color palettes <sup>1</sup>. This job opportunity is part of a preliminary project necessary to prepare a transfer , which aims at making the published technique available for artistes and general public in various context. The engineer mission will be to develop a plugin in Adobe Illustrator, implementing the technique and providing new exploration tools for color palettes.

The recruited engineer will be in charge of the development of the plugin in Adobe Illustrator (architecture, UI) and will collaborate with the researchers on the implementation of the core algorithms

## Education

- Master or PhD in Computer Science / Applied Mathematics

## Key Qualifications

- Familiarity with vector-graphics software (at least Adobe Illustrator)
- Experience working in research environment preferred
- Strong C++ development skills
- Good knowledge on linear algebra, non-linear optimization, color processing
- Strong problem-solving skills
- Must be able to work collaboratively and communicate with researchers and other engineers
- English or French language (written and spoken)

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1 <https://www.irit.fr/STORM/site/constrained-palette-space-exploration/>