

## CONSTRAINED STIPPLES FROM IMAGES



This project starts with building a system that is capable of creating a constrained stippling of the given image. The system further will be used to develop interesting applications to give an NPAR feeling to various objects.

The topic requires a good knowledge in programming, optimization, and geometry. Moreover, the project requires a basic understanding in image/video processing.

Supervisor: Amal Dev PARAKKAT (adp.upasana@gmail.com) - Office 5.B22

A few references in this direction are:

### \*References

- [1] Oliver Deussen, Marc Spicker, and Qian Zheng. "Weighted Linde-Buzo-Gray Stippling". In: *ACM Trans. Graph.* 36.6 (Nov. 2017). ISSN: 0730-0301.
- [2] Fernando de Goes et al. "Blue Noise through Optimal Transport". In: *ACM Trans. Graph.* 31.6 (Nov. 2012).
- [3] Sung Ye Kim et al. "Stippling by Example". In: *Proceedings of the 7th International Symposium on Non-Photorealistic Animation and Rendering*. NPAR '09. 2009, pp. 41–50.
- [4] David Vanderhaeghe et al. "Dynamic Point Distribution for Stroke-based Rendering". In: *Rendering Techniques*. The Eurographics Association, 2007.