Hybrid Computational Aesthetic Evaluation using Convolutional Neural Networks: Filtering Generative Art by Interactively Modeling User Tastes

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Recent advances in machine learning techniques have resulted in increasingly effective algorithms for discovering creative solutions to quantifiable optimization problems. In general, problems unaffected by advances in machine learning are not those involving creativity, but those whose optimization functions are difficult to quantify. To teach a computer to produce aesthetically pleasing artwork, one first must define a "cost" function for what makes a piece aesthetically pleasing, either manually or automatically. We're going to try to use Convolutional Neural Networks to make a hybrid Computational Aesthetic Evaluation function and generate artwork that appeals to the user.

I dedicate this paper to science.

Introduction

Related Work

Project Setup

Implementation

Results

Conclusion

Bibliography