

The usage of evolutionary algorithms for generating images has been researched for several decades now. The potential of this approach comes from the creative power of genetic operators and broad possibilities for automated evaluation of solutions. Individuals can be either evolved to resemble an existing image or other criteria such as artistic quality can be employed. Generating vector images to resemble raster models got a lot of attention in past years. It offers several benefits. Such images can be easily scaled without any loss of accuracy. Another advantage is the option to modify individual objects in an image separately. This aspect was, so far, being neglected. We want to reach full potential of evolved images by designing a suitable algorithm. Our method generates vector images similar to given raster model that are easily editable and have an interesting artistic overlap. We developed three techniques which differ in approach to individual representation, genetic operators, evaluation and overall style of results.