

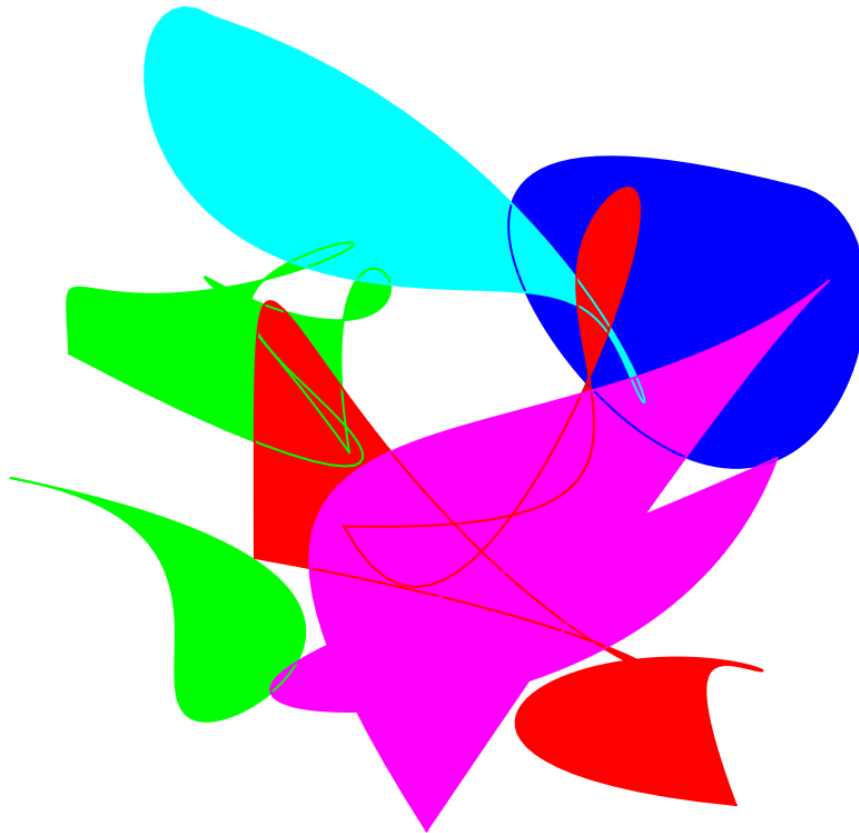
GPT-4 Writes Mathematica Code to Emulate Joan Miró Using Bézier Curves

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Leveraging Bézier curves, the code dynamically creates a series of colorful, closed paths on a canvas. Each path is both outlined and filled with a vibrant color, reminiscent of Miró's playful use of color in his abstract artworks. The generation process begins with random control points to define the Bézier curves, ensuring a unique and spontaneous creation in each iteration.



```
ClearAll[miroArt];
miroArt[n_Integer: 5, imageSize_Integer: 400] :=
Module[{bezierPaths, colors, lines, polygons, path, pts, discretizedPaths},

(* Generate random closed Bézier paths *)
bezierPaths =
Table[path = RandomReal[{-1, 1}, {RandomInteger[{4, 8}], 2}];
    path = Append[path, First[path]]; (* Close the path *)
    BezierFunction[path], {n}];

(* Define some playful colors *)
colors =
Table[RandomChoice[{Red, Blue, Yellow, Green, Cyan, Magenta, Orange,
    Purple}], n];

(* Discretize Bézier paths to polygons with finer discretization *)
discretizedPaths =
Table[Table[bezierPaths[[i]][t], {t, 0, 1, 0.01}], {i, n}];

polygons = Table[{colors[[i]], Polygon[discretizedPaths[[i]]]}, {i, n}];

(* Create lines from paths *)
lines =
Table[{colors[[i]],
    Line[discretizedPaths[[i]]]}, {i, n}];

(* Combine and display the artwork *)
Graphics[polygons~Join~lines, ImageSize -> imageSize, Background -> White]
]

Table[miroArt[10, 400], {10}]
```

```

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miroArt[n_Integer:5,imageSize_Integer:400]:=Module[{bezierPaths,c
olors,lines,polygons,path,pts,discretizedPaths},(*Generate random
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1,1},{RandomInteger[{4,8}],2}]];
    path=Append[path,First[path]];(*Close the
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    (*Define some playful
colors*)colors=Table[RandomChoice[{Red,Blue,Yellow,Green,Cyan,Mag
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discretization*)discretizedPaths=Table[Table[bezierPaths[[i]][t],
{t,0,1,0.01}],{i,n}];

polygons=Table[{colors[[i]],Polygon[discretizedPaths[[i]]]},{i,n}
];
    (*Create lines from
paths*)lines=Table[{colors[[i]],Line[discretizedPaths[[i]]]},{i,n
}]];
    (*Combine and display the
artwork*)Graphics[polygons~Join~lines,ImageSize-
>imageSize,Background->White]]

Table[miroArt[10,400],{10}]

```