
```
classdef KdTree
    %KDTREE A K-d Tree

    properties
        root KdNode % Root of the tree
    end

    methods
        function obj = KdTree(root)
            %KDTREE Construct an instance of this class
            root.split = 1;
            obj.root = root;
        end

        function obj = insert(obj, config)
            % Insert a config into the tree
            obj.root.insert(KdNode(config, NullKdNode(),
NullKdNode()));
        end

        function near = nearest(obj, search_node)
            % Search for nearest node in tree to search_node
            near = obj.root.nearest(search_node, Config([0,0,0]),
realmax, Path());
        end

        function draw(obj, color)
            % Draw the tree
            obj.root.draw(color);
        end
    end
end
```

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