

### Houdini

Tips for the Beginner

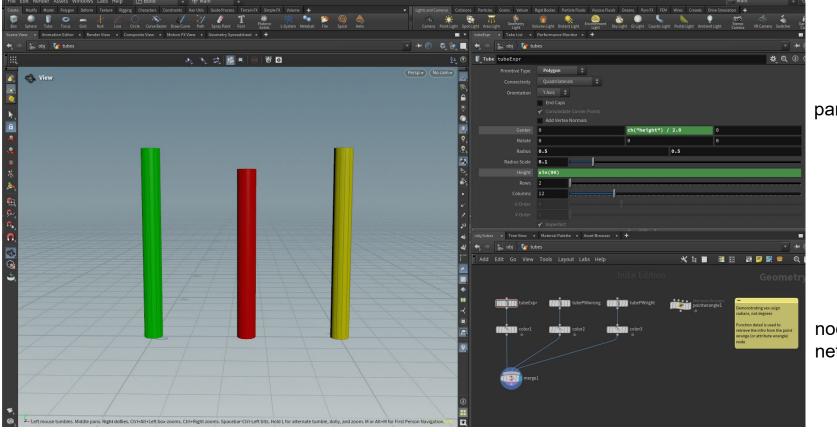
## easy to learn





## node based





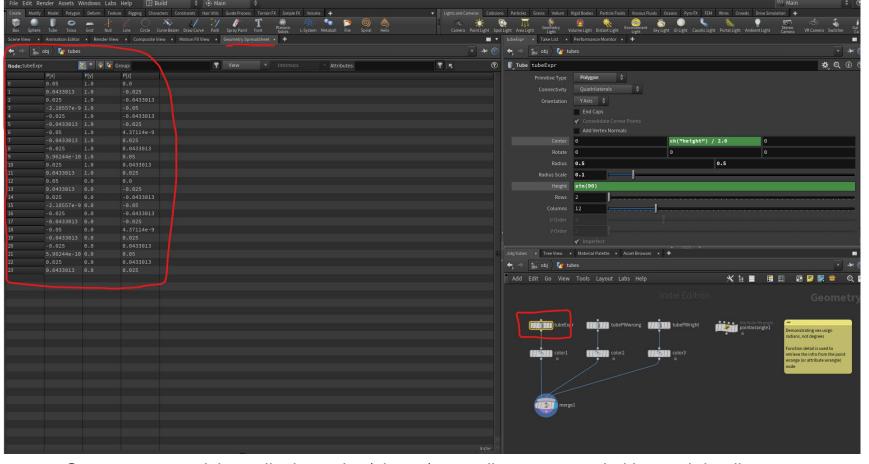
parameters

node network

Examples of nodes, parameters, expressions and functions! Sticky nodes too!

### attributes



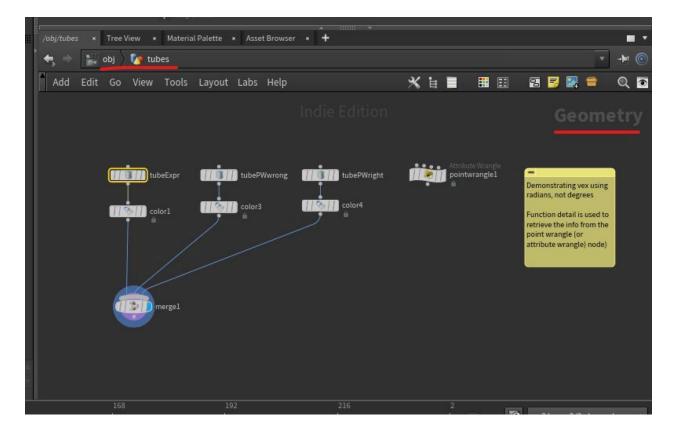


Geometry spreadsheet display point (shown) as well as vertex, primitive and detail

Think of attributes as information that follow the node around

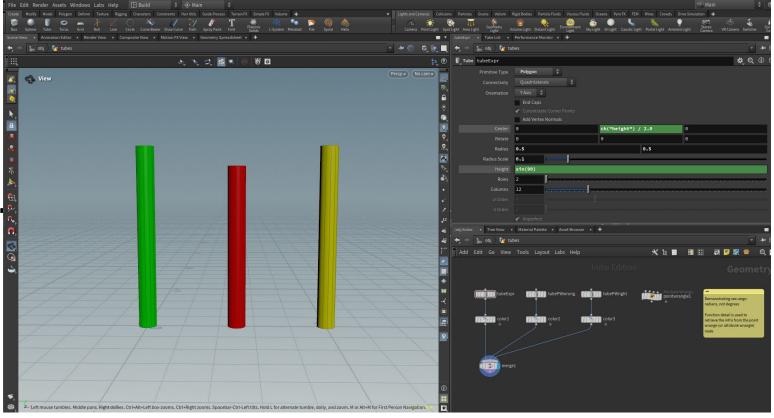
### contextual





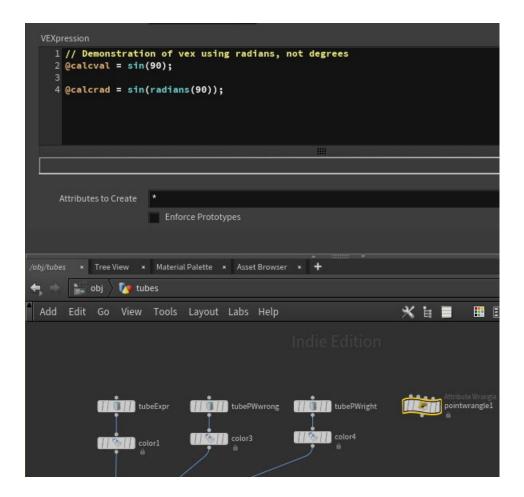
Most commonly you are in the obj/geometry context – but you can be in other contexts as well such as "out" for rendering, "mat" for shaders, etc.

# function do things for you



Functions are a concept from programming class that will help you understand expressions. Inline functions go off and return something. For example, if you give sin and argument sin(90) it will return a value (1 if it is expecting degrees and .893997 if it is expecting radians.

# multilingual



In Houdini you can use multiple languages. There are many ways to add functionality and proceduralism. We will start with hscript and vex, but you can also use python, vops and so on.

Shown is an example of vex code which is adding a detail attribute that can be referenced elsewhere.



## modular



## lots of nodes



### custom nodes