

# Intro to 3D Printing for Brick Organizing

*by Matthew Doll*

## Outline

- Why 3D print?
  - Examples of what it can do
  - Start live demo on small travel printer.
- Types of 3D Printing
  - FDM, Resin, SLS
  - Pros and Cons of each
- FDM
  - Why it's good choice for getting started
  - Printer vendors
    - Bambu lab, Prusa, Creality, Elegoo, Qidi
  - Machine styles
    - Bed slingers, CoreXY, Enclosed, Toolchanger
  - Types of Plastic
    - PLA, PETG,
    - Advanced Materials: ABS, TPU, PC, Nylon
    - Pro and cons of each
  - Software- What is a slicer?
- Picking your first printer
  - Sources for reviews and information
  - Budget
  - What to look for or avoid
- Your First Project
  - How to find free stuff to print
  - How to design custom storage containers free online.
    - Demo of creating storage containers.
- Tips for printing (aka how to avoid all the mistakes I've made over the years)
- Designing from scratch. Where to start:
  - Free Tools: TinkerCAD, OpenSCAD, FreeCAD, etc
  - Paid Tools: Fusion360, OnScape, etc
- A tour of my projects
- Q & A

A sneak peek at my current 3d printing project: a rotary sieve to automate sorting the annoying small tiles and plates...



A bigger version for bricks is in progress...

