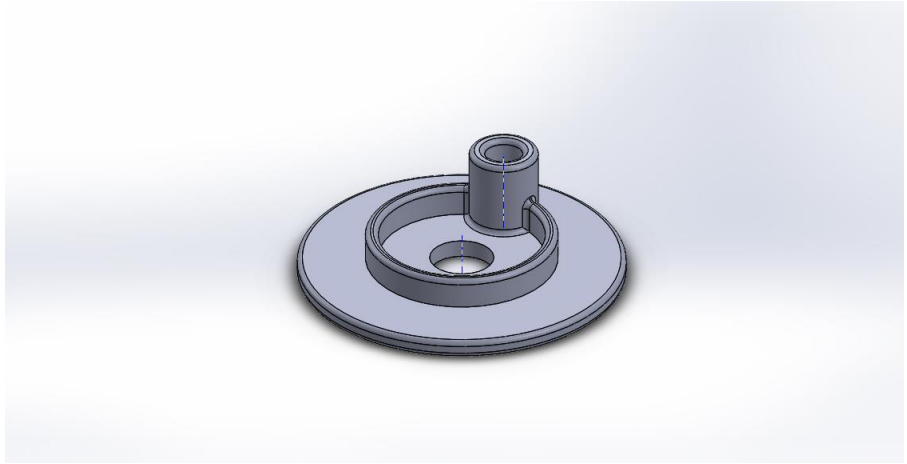
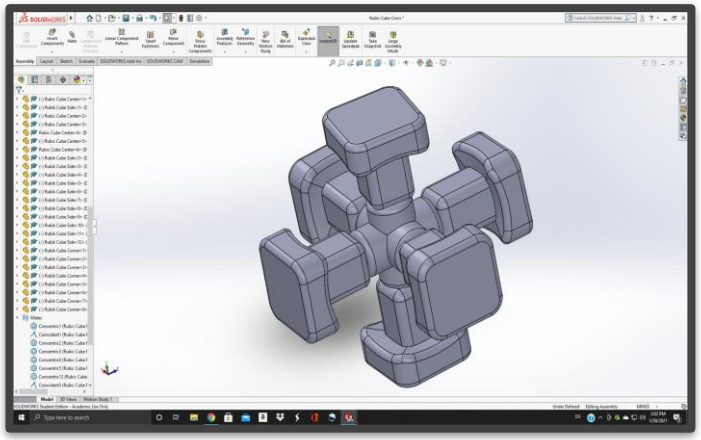
LHHS CTE: Engineering

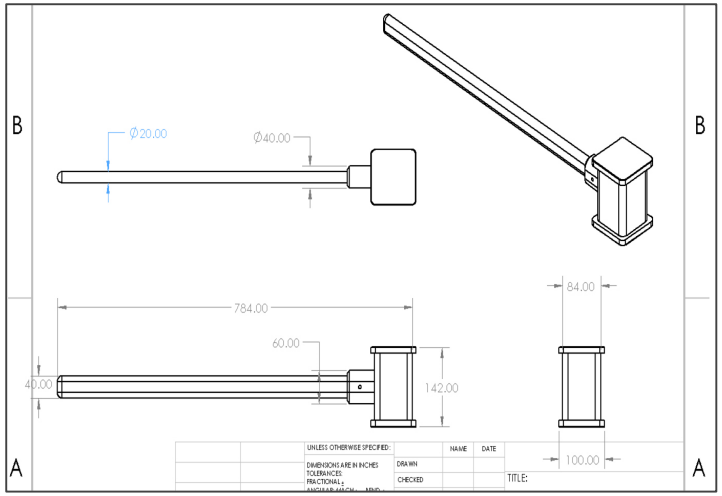


ENG 1 – Introduction to Engineering

ENG 2 – Intermediate Engineering

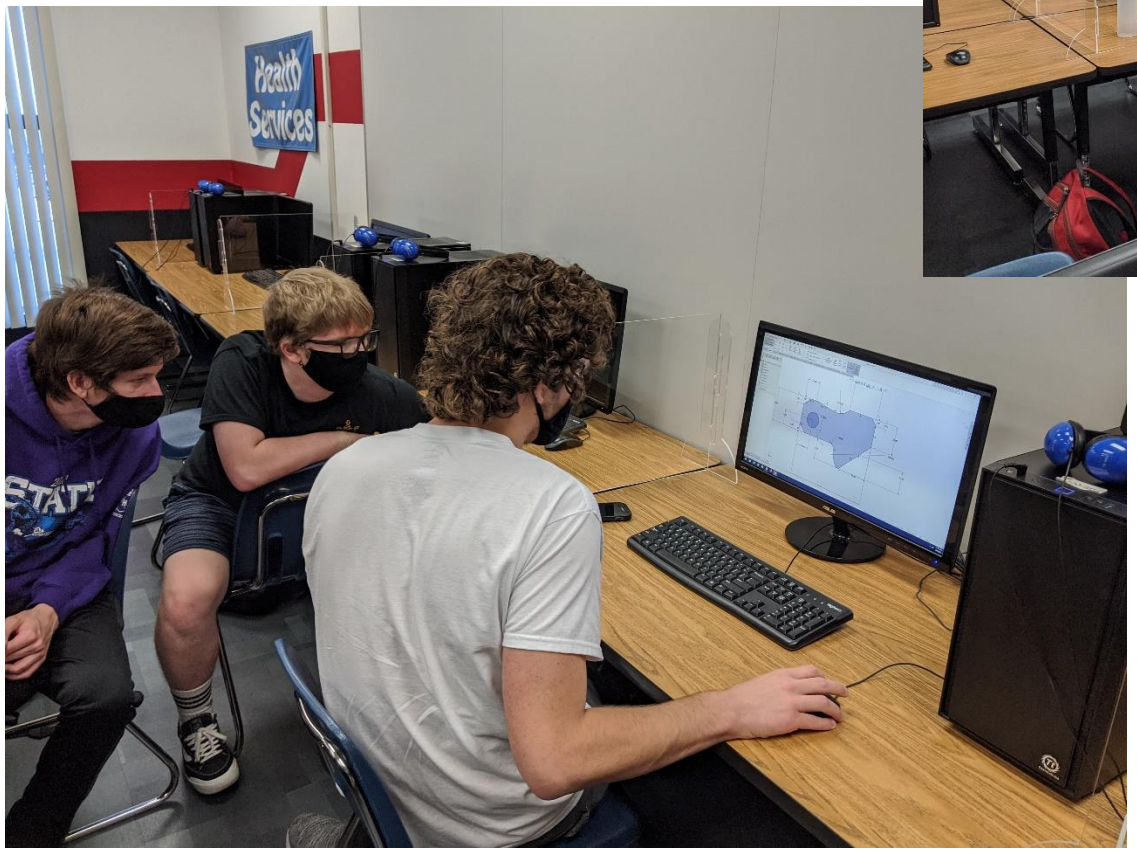
ENG 3 – Advanced Engineering





Instructor: Frank Freedman
Email: frank.freedman@lhusd.org

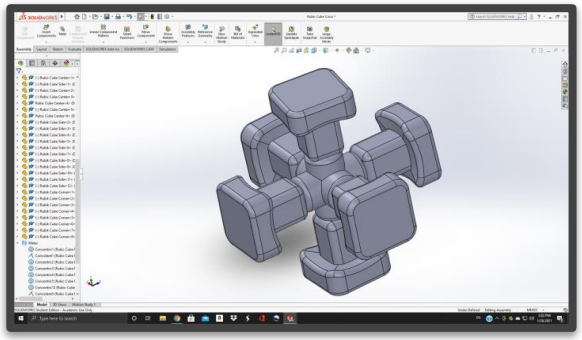
SolidWorks



Goals of ENG Sequence …

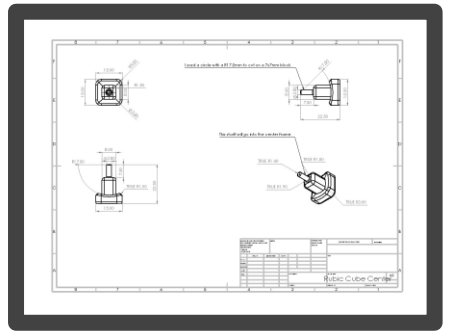
- ❑ Advanced skills in Computer Aided Drawing (CAD)
- ❑ SolidWorks Certification by end of Year 3

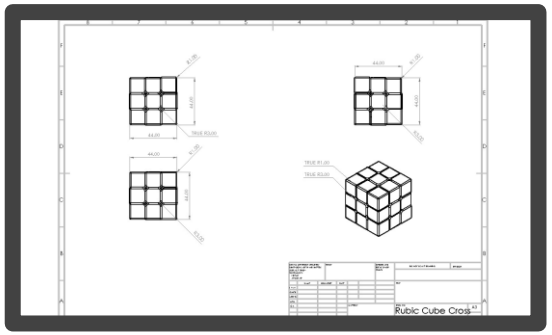
Certified SolidWorks Associate (CSWA):
(Level 1 Certification in Industry Leading CAD Software)

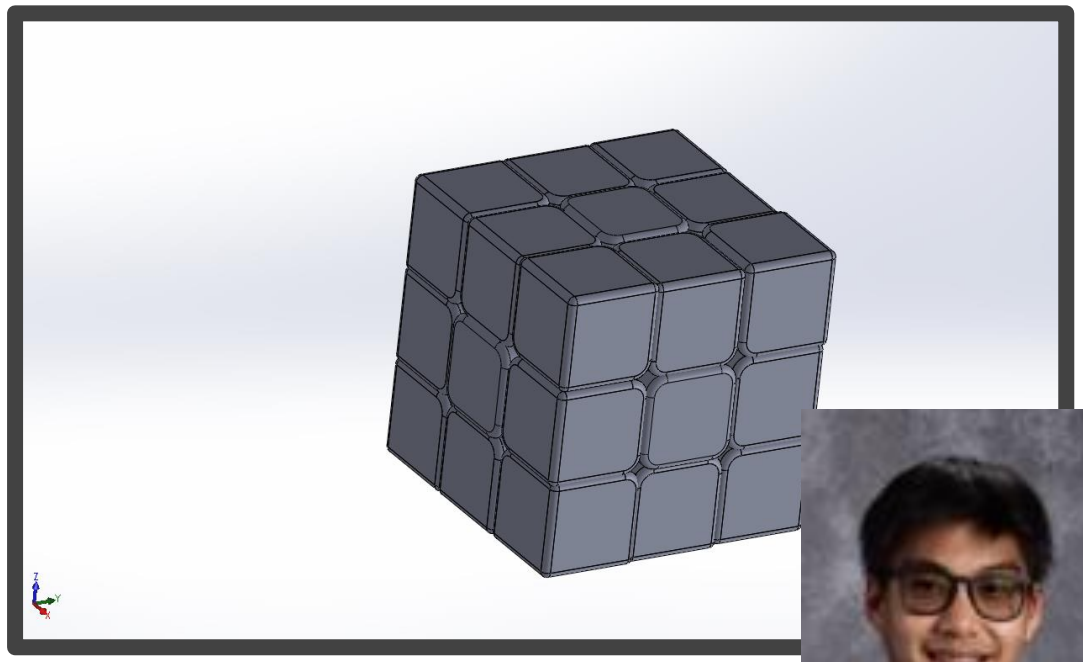


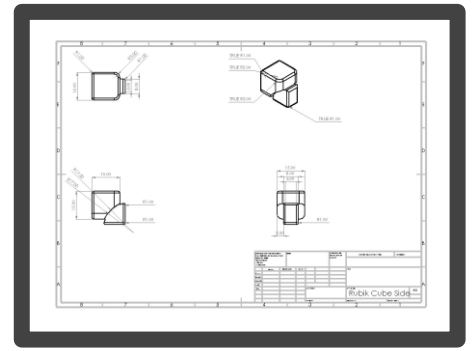
Solidwork's

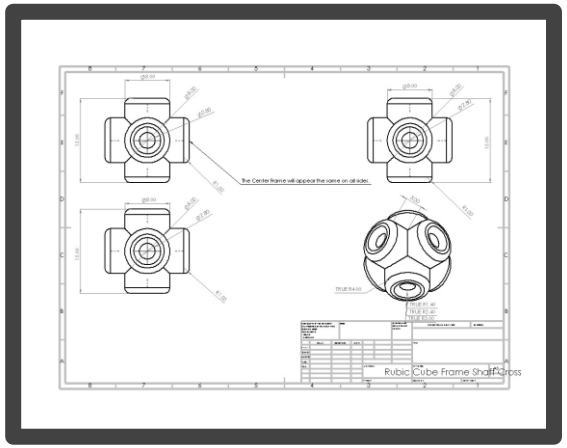
Rubik's Cube

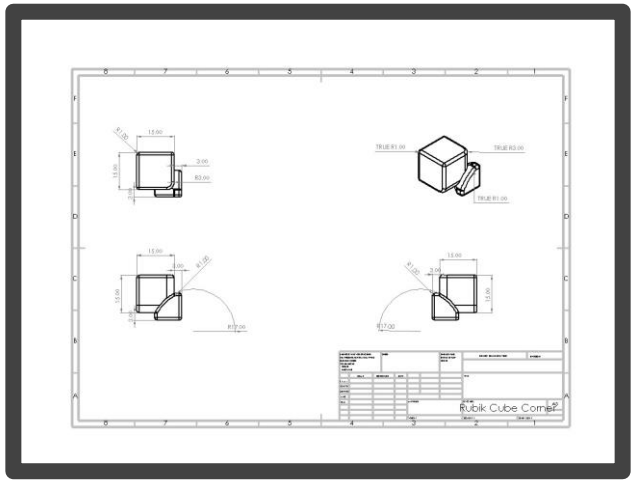








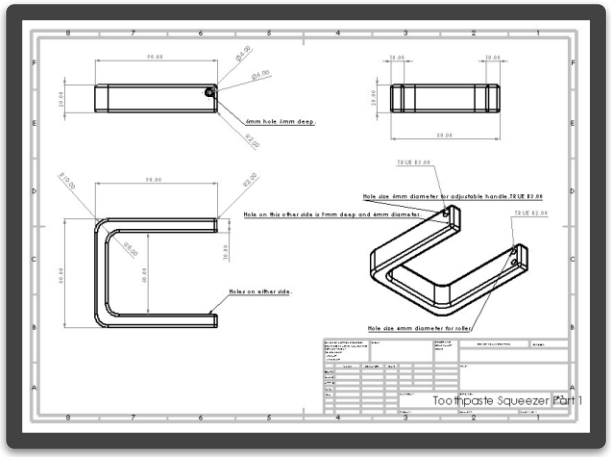


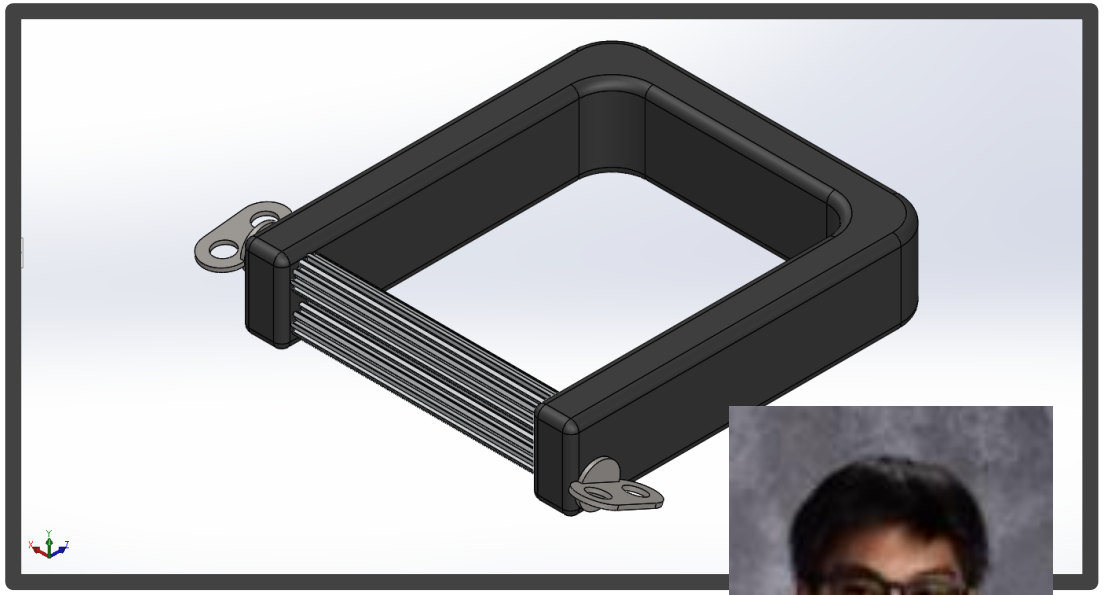


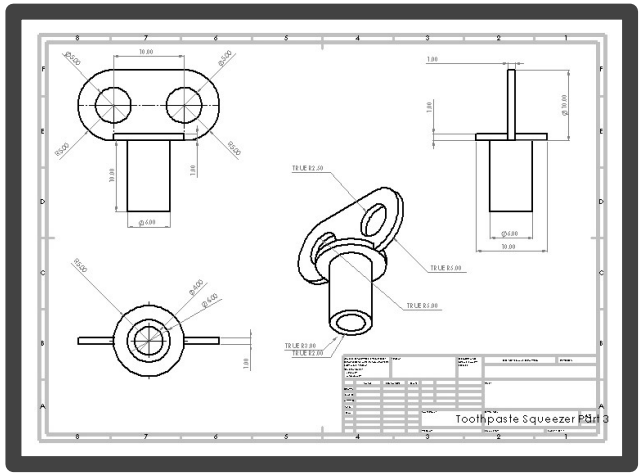
Jamie Henson

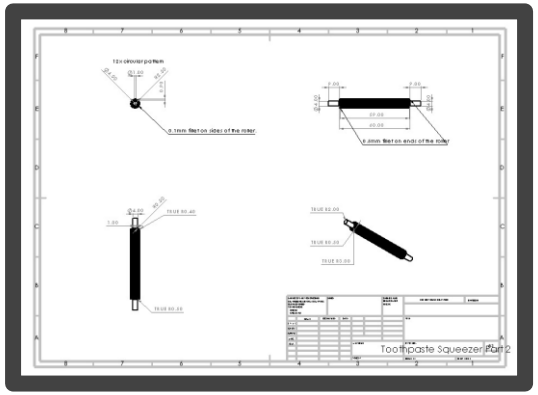
Toothpaste Squeezer

Ever had a hard time rolling your toothpaste? Well, you're in good hands. This toothpaste squeezer will not make any toothpaste go to waste. Just conveniently twist the handle and see the magic!!!

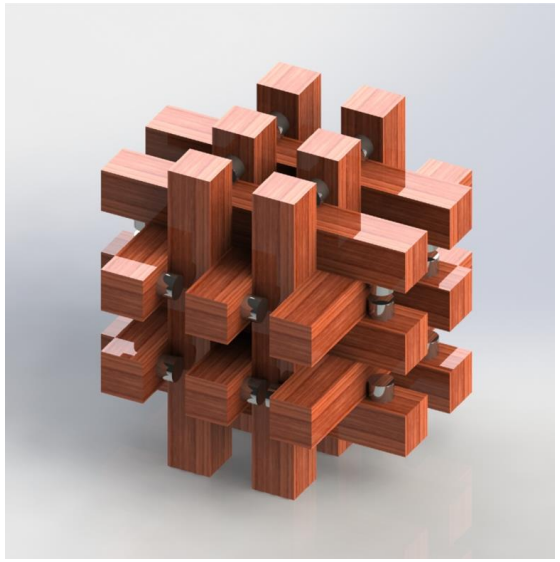


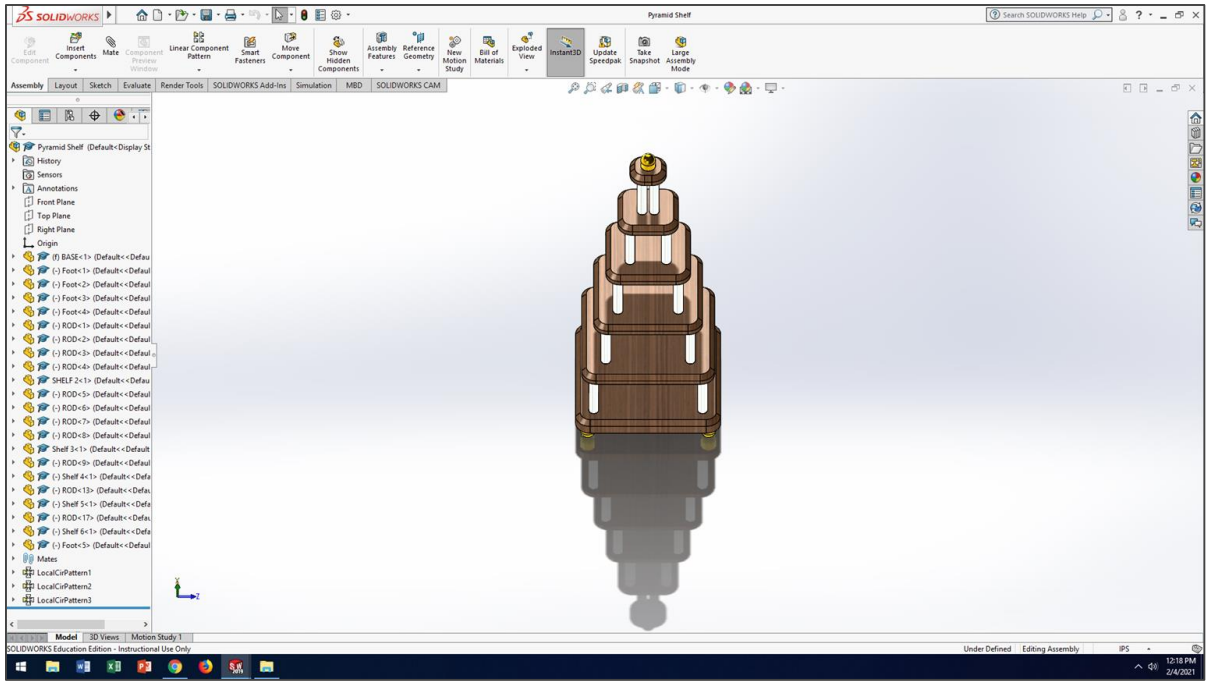


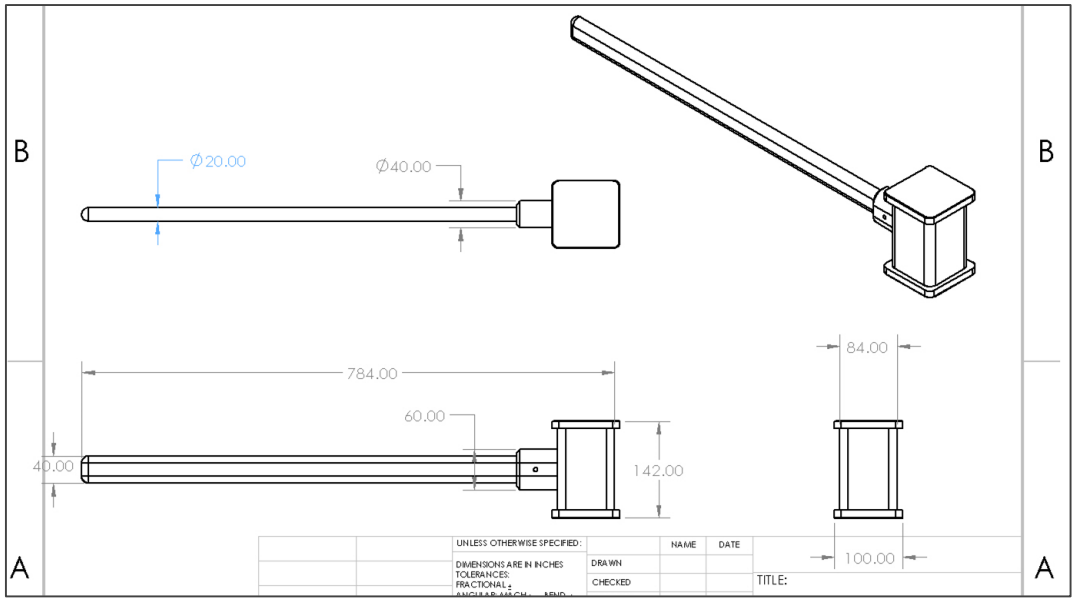




Jamie Henson



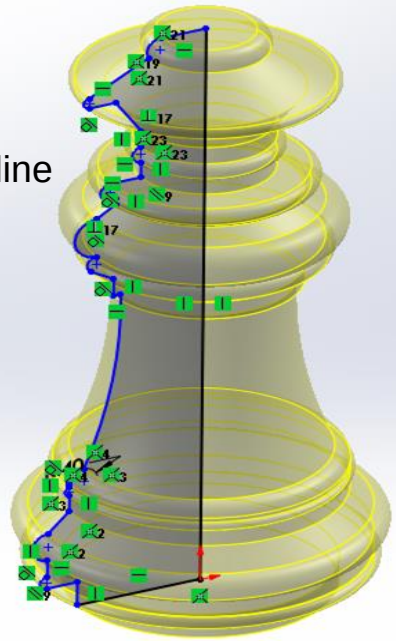


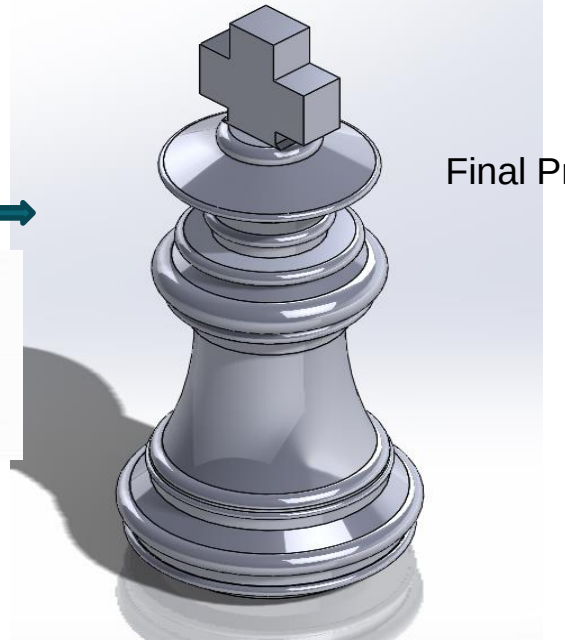


Aaron Miller

SOLIDWORKS Visualize Content

Initial Sketch of Outline



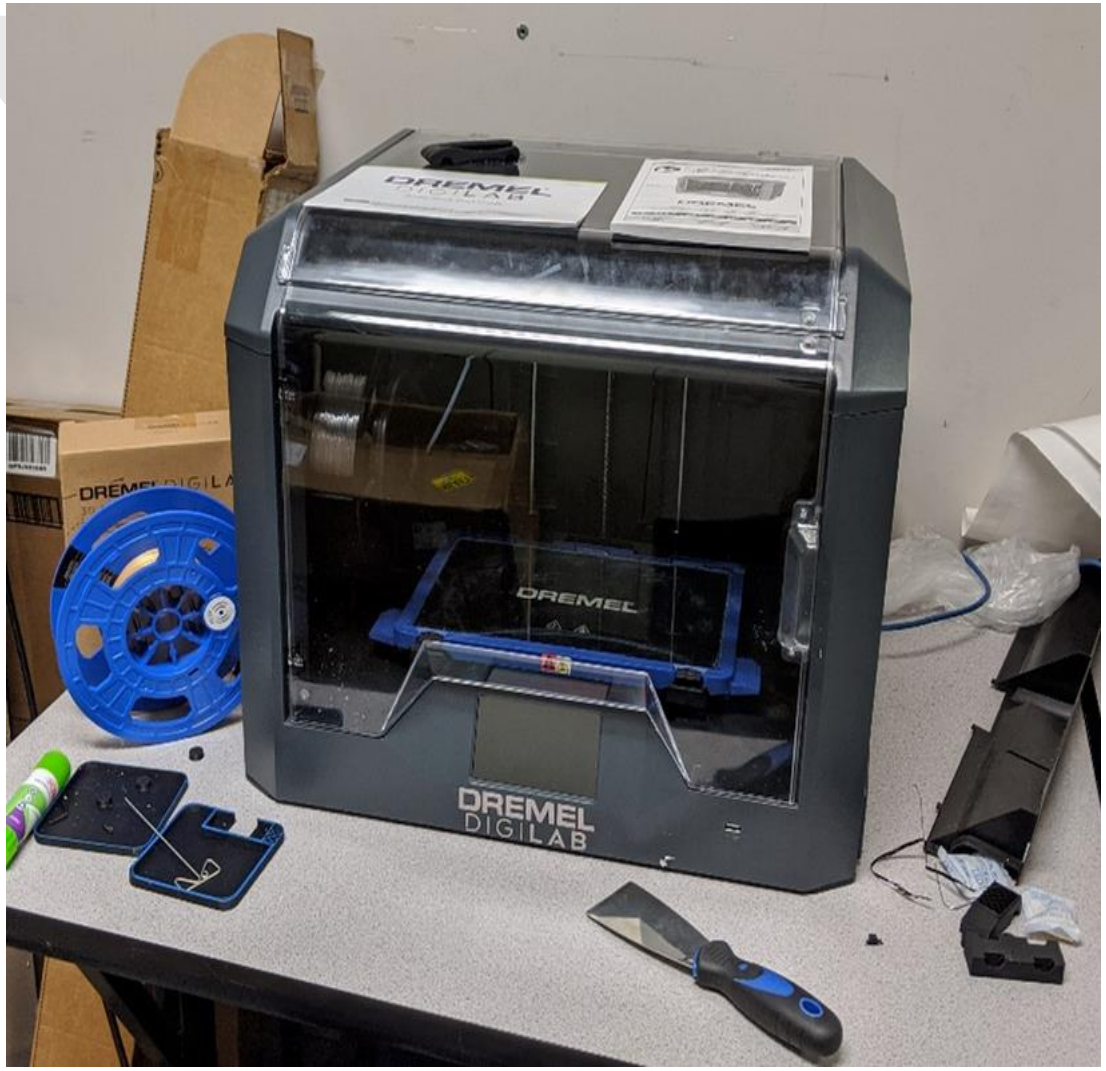


Final Product

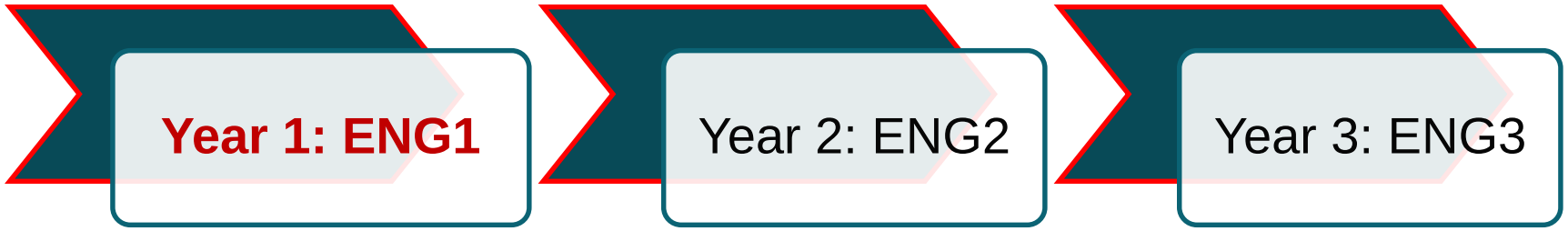
Lance Yearick

SOLIDWORKS Visualize Content

3D Printer: Dremel Digilab

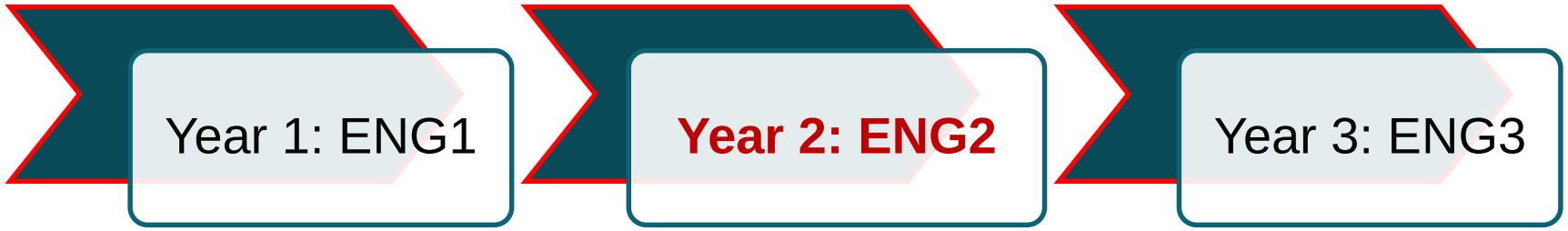


How does the Engineering pathway work?



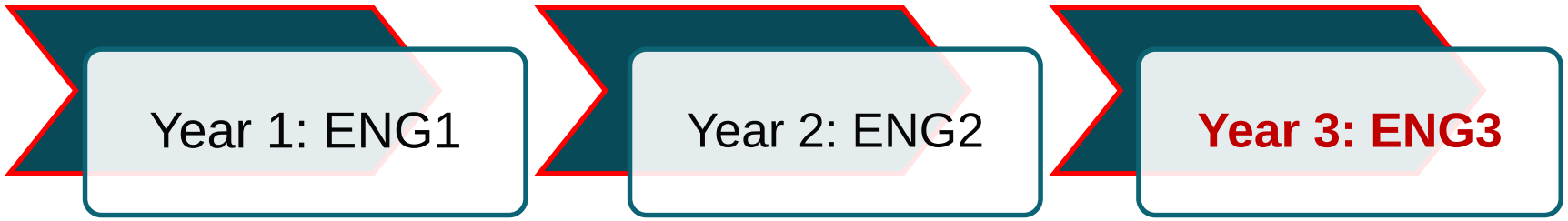
- Basic Engineering Concepts
- Calculations, Units, Dimensions
- Spreadsheets
- Introduction to Technical Drawing, Drafting & CAD
- Beginning SolidWorks Exercises

How does the Engineering pathway work?



- Advanced Engineering Concepts (Stress, Strain, Deformation)
  - Application to Designing Solid Parts and Assemblies
    - SolidWorks Projects of Increasing Complexity

How does the Engineering pathway work?



- Advanced SolidWorks Projects
- Student Directed w Teacher Support
- SolidWorks Certification Exam Preparation
- SolidWorks Certification Exam (Spring Semester)

Questions?

Contact information: Frank Freedman

Email: frank.freedman@lhusd.org

Courses: ENG 1 Intro to Engineering, ENG 2 Intermediate Engineering, ENG 3 Advanced Engineering