<u>3D Printed Footwear</u> CS491 Computational Fabrication

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Intro

Inspiration



Goal

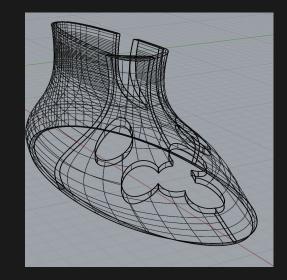
Shoe with:

- <u>Unique</u>
- <u>Modern</u>
- <u>Stylish design.</u>

with comfortable material.

Process

<u>A lot of trial and error.</u>



- InterpCrv: Tracing the sole design.
- Parametric Design: Creating elliptical curves with varying heights and sizes.
- Loft: Forming the inner and outer walls of the shoe.
- Boolean Difference: Shaping the walls and creating holes.
- Solid Union: Combining walls and sole into a single model.

Final Outcome



Reflection

We gained valuable insights such as:

- Designing using creativity
- Teamwork and collaboration
- Material testing

and so on.

Future work

- Work with different types of shoes
- Create a fully finished TPU model
- Use lattice techniques on sole



Thank you!