

# Získávání modelů

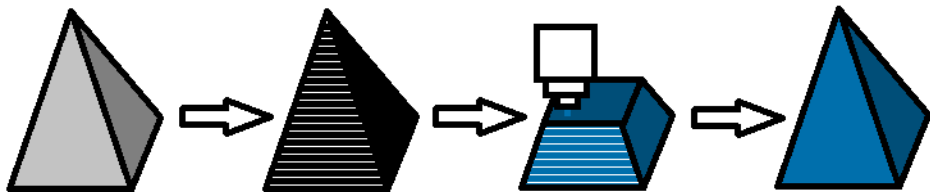
KMI/3DT 3D tisk

Mgr. Markéta Trnečková, Ph.D.

[www.marketa-trneckova.cz](http://www.marketa-trneckova.cz)

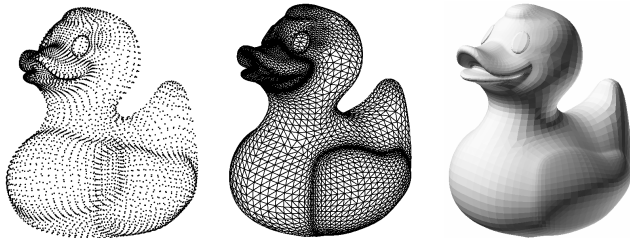


Palacký University, Olomouc

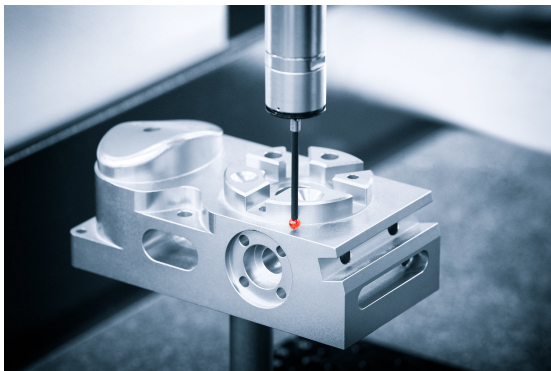


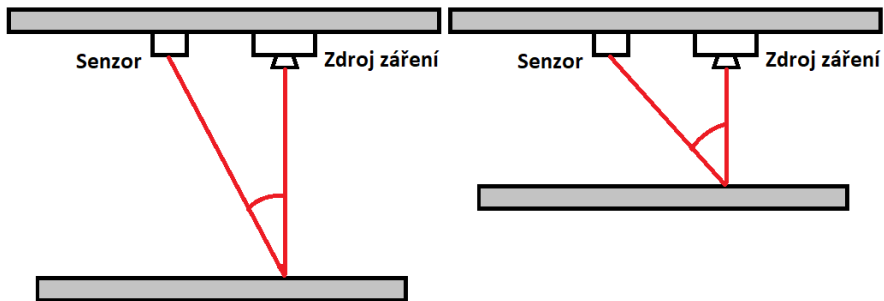
- stáhnout již existující
  - repozitáře
  - modelová tržiště
  - vyhledávače
- použít 3D skenner
- vytvořit vlastní model
  - CAD, 3D modelovací program
  - parametrický CAD

- point cloud
- 3D scanning pipeline



- kontaktní
- nekontaktní
  - aktivní
  - pasivní



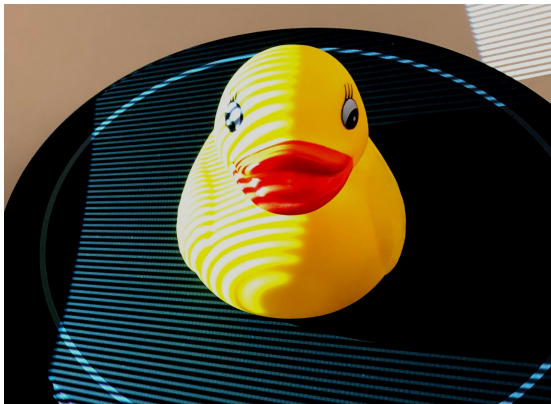


## Example

Předpokládejme, že máme skener, kde je senzor vzdálen od zdroje záření 10 cm. Paprsek, který byl zachycen senzorem, se od povrchu odrazil pod úhlem 45 stupňů. Jak daleko od zdroje je skenovaný objekt?

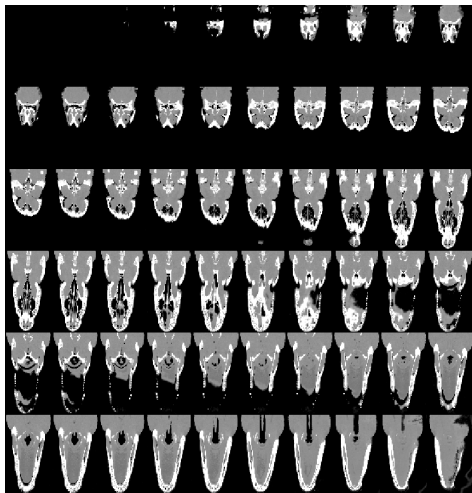


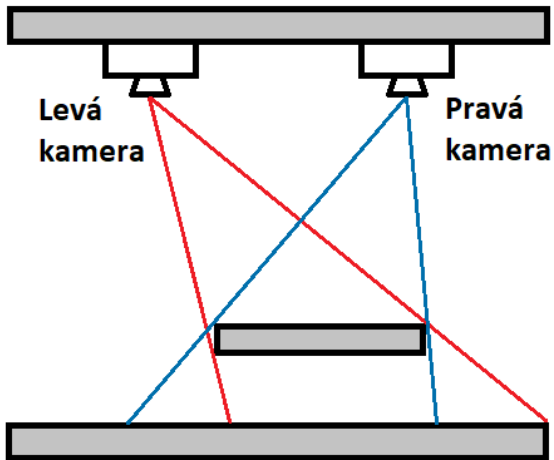


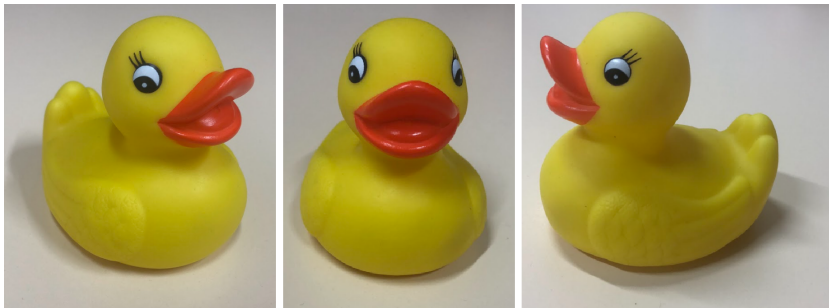




**Video:** <https://youtu.be/H2Ap2UyRdno>



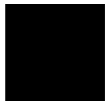




**Software:** Meshroom



Zepředu



Z boku

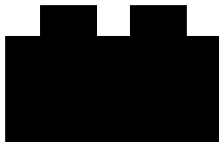


Výsledek

Odhadněte, jak by vypadalo těleso, které má následující siluety:



zepředu



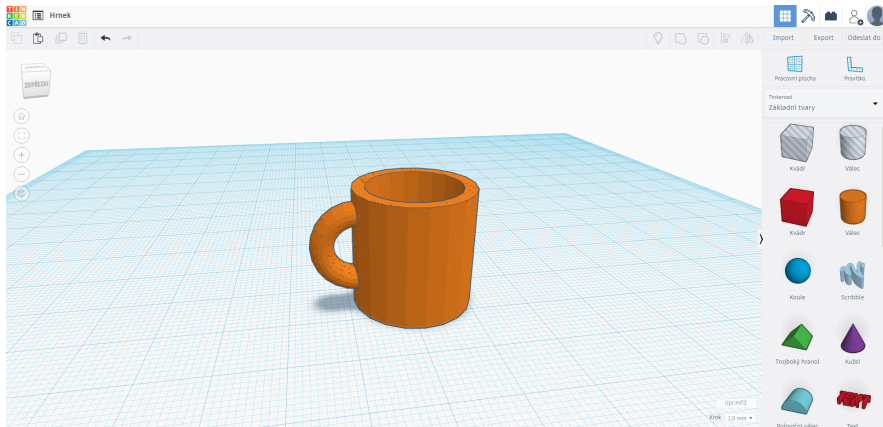
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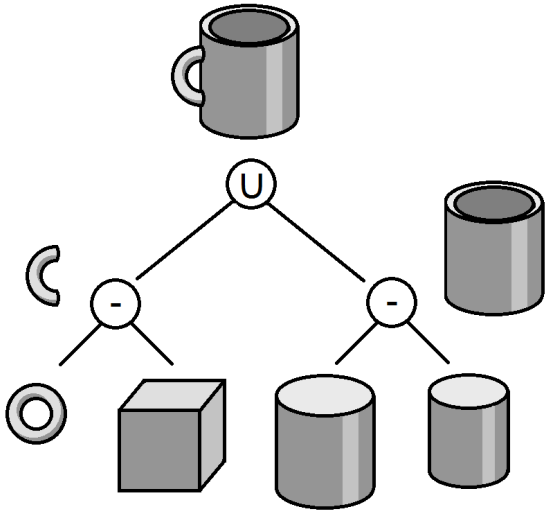


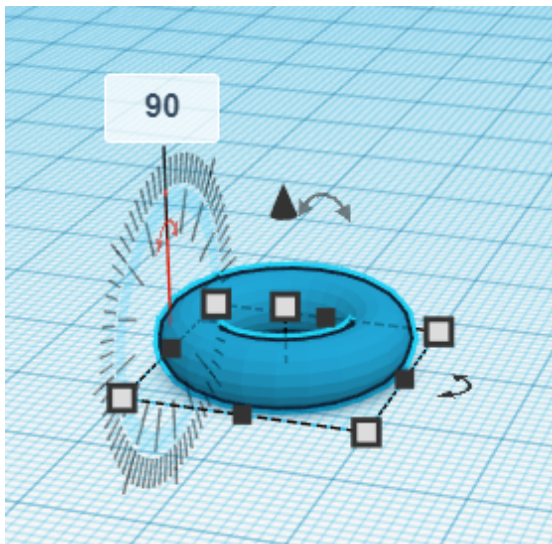
- fotogrammetrické systémy
- Android - 3D creator, Qlone, Scann3D
- iOS - Qlone, Scandy Pro, HSeez 3D

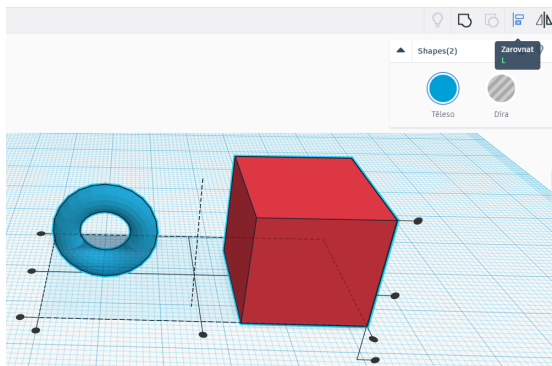


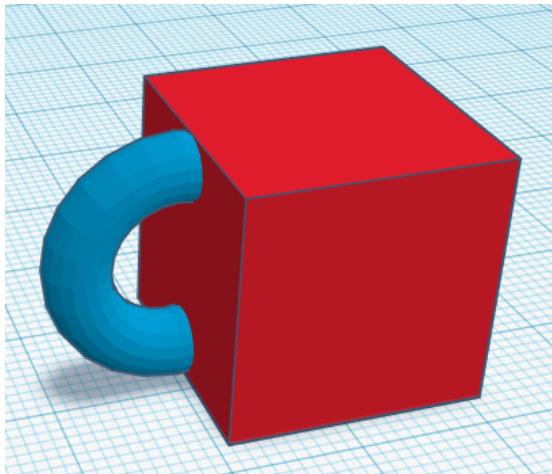
- [www.tinkercad.com](http://www.tinkercad.com)

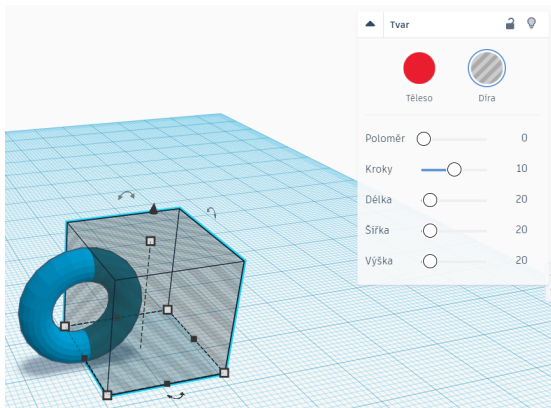


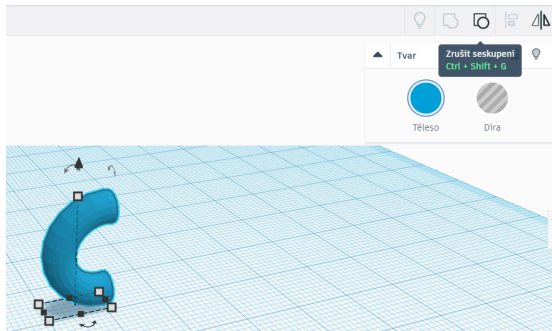


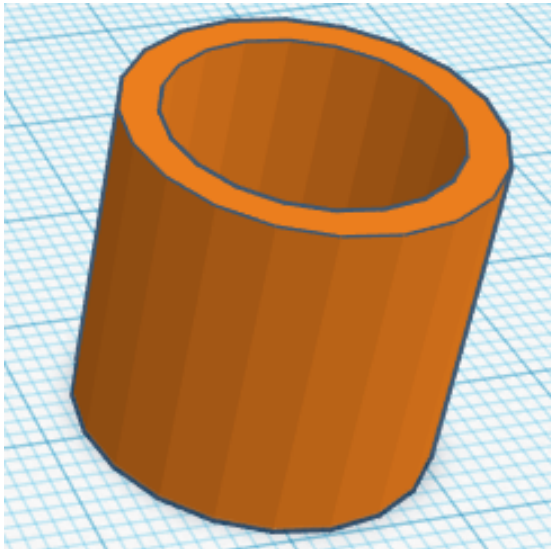




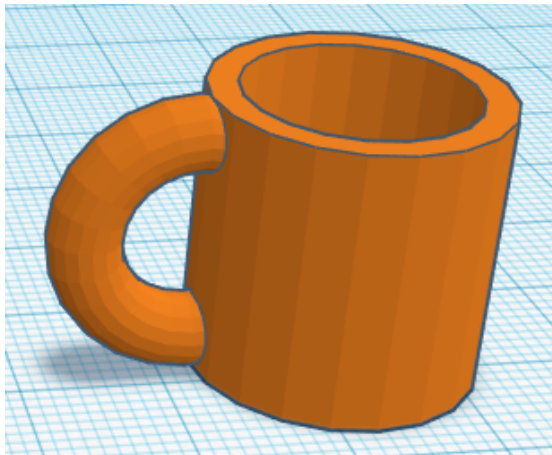






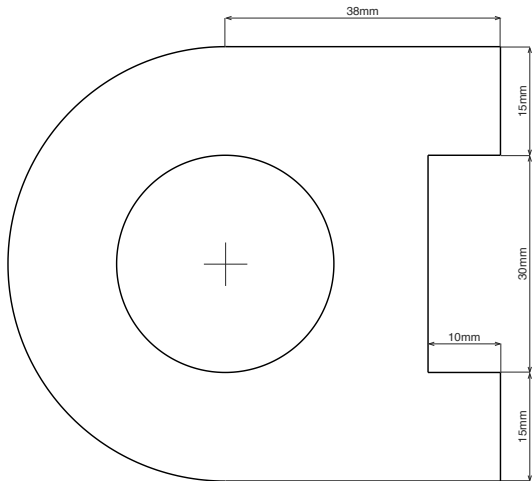




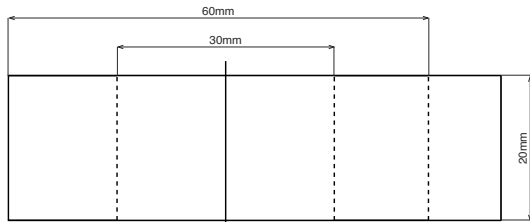


## Example

Jak udělat průnik dvou těles v TinkerCAD?



pohled ze shora



pohled z boku

