TOMAS CABEZON PEDROSO
COMPUTATIONAL DESIGNER
PITTSBURGH, PA | tomascbzn@gmail.com | *https://tomascbzn.com*

Education

- **Carnegie Mellon University · MS in Computational Design**
  Pittsburgh, United States · 2021 September - 2023 June
  · USDoS Fulbright Program and CMU School of Architecture Merit Scholarship
  · Relevant Coursework: Intro to Programming and CS (15-112), Intro to Machine Learning (10-601), Mobile Web Design and Development

- **Universitat Oberta de Catalunya · Master's Degree in Computational Engineering and Mathematics** - GPA 9.04/10
  online · 2020 September - 2021 June
  · Universitat Rovira i Virgili Merit Scholarship
  · Relevant Coursework: Artificial Intelligence, Data Structures and Algorithms, Numerical Methods for Engineering.

- **Universidad Politécnica de Madrid (UPM)· Double Degree in Mechanical Engineering and Industrial Design** - GPA 8.81/10
  Madrid, Spain· 2014-2020 Exchanged programs in:

  · **Universidad Técnica Federico Santa María Valparaís** (2019 Feb-Jul· Valparaiso, Chile.)- Magalhães Exchange student scholarship
  · **Politecnico di Milano** (2018 Sept-2019 Feb· Milano, Italy) - Erasmus Exchange student scholarship
  · **Tongji University Shanghai** (2017 Sept-2018 Jul· Shanghai, China) - UPM-Tongji Exchange student scholarship

Skills

- **Programming languages:** Python (advanced), HTML/CSS/Javascript (intermediate), Matlab (intermediate)
- **Technical:** Maya MEL, Adobe Suite, Autocad, Office, SolidWorks, Blender
- **Languages:** Spanish (native); Basque (native); Chinese (intermediate, HSK4; English (proficient - TOEFL IBT 107/120).

Relevant experience

- **UPM Collaboration Scholarship - Researcher**
  2019 Sept -2020 Jun · Madrid, Spain
  Investigated possibilities of randomness on algorithmic design of new geometrics and 3D modelling with research scholarship support from the Mathematics Department at ETIDI (UPM). Performed the computational implementation of the mathematics of Bezier and Spline curves.

- **西睿羿设计 2G Design Agency - Design intern**
  2018 May-July · Shanghai, China

  Worked in the product design department of this studio specialized in the Chinese market of cosmetics and beauty. Responsible for multiple design projects, taking part in the several parts of the design process, carrying out from sketches to 3D models and rendering as well as the details and standards involved in the creative process.

Notable projects and publications

- **Capabilities and limitations of style transfer with CycleGANs for ring design automatic generation**

(2021, Master's Thesis) Implemented a CycleGAN using Pytorch to study the possibilities of style transfer in design applications. Trained the model to learn and translate images from an initial sketch to a final rendered image.
  publication: *http://hdl.handle.net/10609/136047* | website: *https://tomascbzn.com/cyclegans.html*

- **Use of random methods in the generation of geometric shapes**

(2020, Senior year thesis in mechanical engineering, Spanish) Developed and implemented an algorithm to randomly generate different ring models using splines and fabricated the models by 3D printing and posterior casting.
  publication: *https://oa.upm.es/69208/* | website: *https://tomascbzn.com/xyu.html*

Accomplishments

2021-2023 · **Fulbright Fellowship** - Awarded by Spanish Fulbright Commission
2016 · **Excellence Award for best university students** - Award by Madrid Regional Government Council
2015 · **ETSIDI 's Best Student Record of first university year** - Award by School of Industrial Engineering and Design (ETSIDI) Council
2015 · **UPM Academic Excellence Award** - Award by UPM for being the best student of on the Industrial Area
2012 - 2021 · **Viuda de Epalza Excellence Award for best students** - Recognised by Bilbao's City Council's Department of Education