3rd GECKO follow-up project meeting

DC-2 Presentation

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Gecko
Design for *IGA*-type discretization workflows

Funded by the European Union

About me
Personal Info

Full Name	**Polytimi Zisimopoulou**
Age	**28**
Born & raised in	**Athens, Greece**
Coming from	**Greece & Ethiopia**
Hobbies	**Dancing, Reading, …**

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About me

Bachelor's Degree in Mathematics | 2018

University of Athens, Greece

o Stream: Applied Mathematics

ΕΛΛΗΝΙΚΗ ΔΗΜΟΚΡΑΤΙΑ
Εθνικόν και Καποδιστριακόν
Πανεπιστήμιον Αθηνών
—— ΙΔΡΥΘΕΝ ΤΟ 1837 ——

Master's Degree in Applied Mathematical Sciences | 2022

National Technical University of Athens, Greece

o Stream: Computational Mathematics

o Thesis: *Bézier decomposition for T-spline interpolation in two-dimensional potential problems*
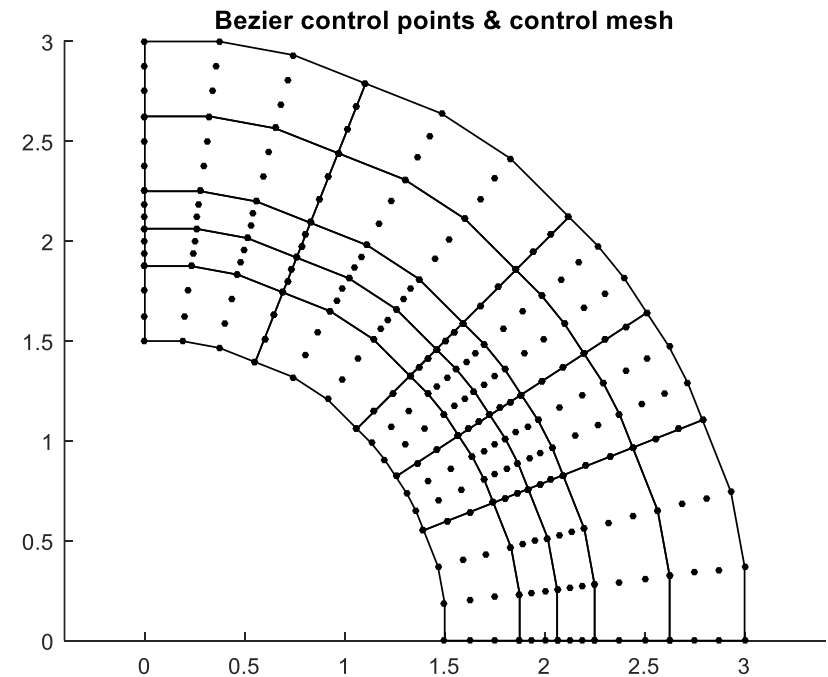
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Master Thesis

Master Thesis title: *Bézier decomposition*

for T-spline interpolation

in two-dimensional potential problems

Idea: Using the resulted Bezier functions
as the IGA solution space basis
after performing Bezier Decomposition

Supervised by: Professor Christopher Provatidis

Bezier control points & control mesh

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DC2– Isogeometric discretizations in computational solid mechanics

Centre Internacional de Mètodes Numèrics a l'Enginyeria (CIMNE)

Universitat Politècnica de Catalunya (UPC)

Supervisors: Lucia Gratiela Barbu, Alejandro Cornejo

Objectives:

- Applicability of IBRA-type discretization to problems in solid mechanics.

- Study of the use of trimming in 3D volumetric solids

- Exploration of the interaction between the discretization in multiple patches and material modeling-related aspects

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Thank you!

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European Commission