

Jeet Desai

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Born: 27 March, 1995
Unmarried, No kids

EDUCATION

Université Pierre et Marie Curie
M2, Mathématiques de la
modélisation
Grad. Oct 2018 | Paris
CGPA: 15.5/20

BITS-Pilani, Pilani-campus
B.E.(Hons) Mechanical Engg.
Grad. May 2017 | Pilani, India
CGPA: 9.26 / 10.0

Higher Secondary Certificate
Grad. May 2013 | Mumbai
Score: 91%

CONFERENCES

CSMA, Giens, 13-17 May, 2019
Preprint

PGMO Days, Dec 3-4, 2019

FreeFEM days, Dec 10-11, 2020
Talk

WCCM-ECCOMAS, 11-15 Jan, 2021

WCSMO, 13-18 June, 2021

TECHNICAL SKILLS

Numerical computation software:
FreeFem++ • MATLAB • Maple

CAD and Simulation
Solidworks • ANSYS

LANGUAGES

English, French (Working proficiency)
Hindi, Gujarati (Native or bilingual)
Marathi (Elementary proficiency)

EXPERIENCE

Université de Paris | Doctoral student

October 2018 – October 2021 | Paris, France

Topology optimization for structures subjected to contact, plasticity, and fracture
Under TOP project; Partners: Renault, Airbus, Safran, ESI and IRT-SystemX
Supervisors: François Jouve and Grégoire Allaire

IRT-SystemX | Research Intern

April 2018 – October 2018 | Paris, France

Topology optimization in contact mechanics using level-set method for TOP project

SIMaP, Grenoble INP | Research Intern

July 2016 – Dec 2016 | Grenoble, France

Shape optimization of elasto-acoustic system using level-set method

PUBLICATIONS

Topology optimization of structures undergoing brittle fracture
(under preparation)
J.Desai, G.Allaire, F.Jouve

Topology optimization in quasi-static plasticity with hardening using a
level-set method
Structural and Multidisciplinary Optimization (under review)
J.Desai, G.Allaire, F.Jouve, C.Mang

Coupled topology optimization of structure and connections in bolted
mechanical systems
Computer methods in applied mathematics (submitted)
L.Rakontodrainibe, J. Desai, P.Orval, G.Allaire

Topology optimization in acoustics and elasto-acoustics via a
level-set method
Journal of Sound and Vibration, Elsevier
J. Desai, A. Faure, G. Michilaidis, R. Estevez, G. Parry

Natural response of non-smooth oscillators using homotopy analysis
combined with galerkin projections
arXiv
J. Desai, A. Marathe

Transition curves of mathieu-like equations via homotopy analysis
and galerkin projections
arXiv
J. Desai, A. Marathe