PARASHAR Shaifali

Postdoctoral Researcher
CVLAB-EPFL, Switzerland
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Email: shaifali.parashar@gmail.com
Website
32 years (DoB: 30/08/1988), Married, Indian
Languages: Hindi (Native), English (Bilingual) and French (A2/B1)

Work Experience

Postdoctoral Researcher: CVLAB-EPFL, Switzerland — March'19 –

Postdoctoral Researcher: Université Clermont Auvergne, France — Oct'17 – Dec'18

Network Engineer: Ericsson India Pvt. Ltd., India — May'10 – July'12

Education

PhD in Computer Vision: Université Clermont Auvergne, France — Sep'14 – Aug'17
Title: Image-based deformable 3D reconstruction using differential geometry and cartan's connections
Supervisors: Prof. Adrien Bartoli and Dr. Daniel Pizarro

MSc in Computer Vision: Université de Bourgogne, France — Sep'12 – June'14

Bachelor in Information And Communication Technology: DA-IICT, India — Aug'06 – May'10

Supervision Responsibilities

Jose Lamarca: PhD student at University of Zaragosa, Spain
Jan Bednarik: PhD student at CVLAB-EPFL, Switzerland
Yuxuan Long: MSc student at CVLAB-EPFL, Switzerland
Paul Gafton: MSc student at CVLAB-EPFL, Switzerland
Yanhao Zhang: PhD student at University of Technology Sydney, Australia
Yongbo Chen: PhD student at University of Technology Sydney, Australia

Reviewing Responsibilities

Computer vision conferences (CVPR, ICCV, ECCV, ACCV, 3DV, WACV) and journals (PAMI, IJCV)
Robotics conference IROS and journal I-RAL

Other Responsibilities

I served as AE for IROS 2021.
I am a keynote speaker and a member of the organizing committee at the winter school dedicated to "SLAM in deformable environments". Link: https://www.uts.edu.au/slam-winter-school

Awards and Recognition

My PhD thesis was awarded as the best thesis for the engineering school at Université Clermont Auvergne, France under the competition "Prix de Thèse UCAF 2018".
I received the "Charpak Scholarship of Excellence 2012" for my masters at Université de Bourgogne, France.

Referees

1. Prof. Pascal Fua (CVLAB-EPFL, Switzerland), Email: pascal.fual@epfl.ch
2. Prof. Adrien Bartoli (Institut Pascal-Université Clermont Auvergne, France), Email: adrien.bartoli@gmail.com
3. A/Prof. Shoudong Huang (University of Technology Sydney, Australia), Email : Shoudong.Huang@uts.edu.au

Publications: Peer-reviewed Journals

Robust Isometric Non-Rigid Structure-from-Motion
S. Parashar, D. Pizarro and A. Bartoli
PAMI: *IEEE Transactions on Pattern Analysis and Machine Intelligence,* May 2021

DefSLAM: Tracking and Mapping of Deforming Scenes from Monocular Sequences
J. Lamarca, S. Parashar, A. Bartoli and J.M.M. Montiel
TRO: *IEEE Transactions on Robotics,* Accepted in July 2020 (to appear in ICRA 2021 as well)

GarNet++: Improving Fast and Accurate Static 3D Cloth Draping by Curvature Loss
E. Gundogdu, V. Constantin, S. Parashar, A. Seifoddini, M. Dang, M. Salzmann, and P. Fua
PAMI: *IEEE Transactions on Pattern Analysis and Machine Intelligence,* July 2020

Local Deformable 3D Reconstruction with Cartan's Connections
S. Parashar, D. Pizarro and A. Bartoli
PAMI: *IEEE Transactions on Pattern Analysis and Machine Intelligence,* October 2018

Isometric Non-Rigid Shape-from-Motion Solved using Riemannian Geometry in Linear Time
S. Parashar, D. Pizarro and A. Bartoli
PAMI: *IEEE Transactions on Pattern Analysis and Machine Intelligence,* October 2017

Publications: Peer-reviewed Conferences

Local Non-Rigid Structure-From-Motion From Diffeomorphic Mappings
S. Parashar, M. Salzmann and P. Fua
CVPR: *IEEE Conference on Computer Vision and Pattern Recognition*, 2020

Shape Reconstruction by Learning Differentiable Surface Representations
J. Bednarik, S. Parashar, E. Gundogdu, M. Salzmann and P. Fua
CVPR: *IEEE Conference on Computer Vision and Pattern Recognition*, 2020

3DVFX: 3D Video Editing using Non-Rigid Structure-from-Motion **(Oral)**
S. Parashar and A. Bartoli
Eurographics (Short Papers), 2019

Self-Calibrating Isometric Non-Rigid Structure-from-Motion
S. Parashar, A. Bartoli and D. Pizarro
ECCV: *European Conference on Computer Vision*, 2018

Isometric Non-Rigid Shape-from-Motion in Linear Time **(Oral)**
S. Parashar, D. Pizarro and A. Bartoli
CVPR: *IEEE Conference on Computer Vision and Pattern Recognition*, 2016

As-Rigid-As-Possible Volumetric Shape-from-Template
S. Parashar, D. Pizarro, A. Bartoli and T. Collins
ICCV: *IEEE International Conference on Computer Vision*, 2015

Publications: Under Review

A Closed-Form Solution to Local Non-Rigid Structure-from-Motion
S. Parashar, P. Gafton, Y. Long, M. Salzmann and P. Fua
Submitted to PAMI: *IEEE Transactions on Pattern Analysis and Machine Intelligence*

Temporally-Coherent Surface Reconstruction via Metric-Consistent Atlases
J. Bednarik, V. G. Kim, S. Chaudhuri, S. Parashar, M. Salzmann, P. Fua and N. Aigerman
Submitted to ICCV: *IEEE International Conference on Computer Vision,* 2021