Assia Benbihi

✉ assia.benbihi@gmail.com 📱 abenbihi.github.io
References: Cédric Pradalier, Matthieu Geist, Ondrej Chum

C++, python
github.com/abenbihi

Education

Postdoc in Visual Localization *CVUT, Prague*   Prague, Czechia, 05/20-06/22

PhD, Computer Vision and Machine Learning *CentraleSupelec, UMI2958 GeorgiaTech-CNRS* Metz, France, 05/20

Master of Electrical and Computer Engineering *Georgia Institute of Technology*   Atlanta, Georgia, 12/16

Master of Science in Telecommunication Engineering *Telecom SudParis*   Paris, France, 06/15

Bachelor in Maths and Physics ('Classe prepa') *Lycee Hoche*   Versailles, France, 06/13

Publications

A complete list is available abenbihi.github.io/#publications.

Object-Guided Day-Night Visual Localization in Urban Scenes A Benbihi, C Pradalier, O Chum, ICPR 2022

Image-Based Place Recognition on Bucolic Environment Across Seasons From Semantic Edge Description
A Benbihi, S Arravechia, M Geist, C Pradalier, ICRA 2020

ELF: Embedded Localisation feature in pre-trained CNN A Benbihi, M Geist, C Pradalier, ICCV 2019

Semantic Nearest Neighbor Fields Monocular Edge Visual-Odometry X Wu, A Benbihi, A Richard, C Pradalier

Semi-Supervised Domain Adaptation with Representation Learning for Semantic Segmentation across Time A Benbihi, M Geist, C Pradalier, ICONIP 2019

Grants

Topic: Domain-Aware Image Matching. Duration: 3 years. Budget: 200K Czech Science Foundation
Supervision: 1 PhD and 3 Master students. (Under revision)

Teaching

Algoritms: master level class at CVUT (description here)

Supervision

Bachelor and Master Projects.

Work Experience

Niantic *Research Intern*   07/22-11/22

Thales *Research Software Engineer*   05/17-05/20
I develop a software prototype to automate visual inspection on low-contrast images with few features (**C++**).

Thales *Research Software Architect Intern*   01–07/16
I designed and developed a prototype of large-scale searchable encryption from a theoretical paper (**C++**).

Honours

ICCV21 Outstanding reviewer

Andre Blanc-Lapierre Award; Fondation Mines-Telecom Award *Ranking: 2nd*   2016
For the most innovative contributions of engineering interns across France.

Software

Nonexhaustive list of libraries/tools I am fluent with: OpenCV, Tensorflow, Pytorch, COLMAP, ROS
Open Source Contribution
ANUBIS (**C++** geometry library for vanishing point estimation, plane segmentation and image rectification)
WASABI (**Python**) Research code for image retrieval from semantic edge geometric features.
pydata (**Python**) Set of tools to load and parse the CMU-Seasons and the Symhony dataset.
ELF (**Python**) Research code for image feature matching.
Scikit-learn (**Python**) Functional tests.

Leadership / Community Service

Website Chair 3DV 2022
Program Committee: CVPR, ICCV, ECCV, 3DV, ICRA, IROS, ICLR, NeurIPS
Team manager volunteer at AIESEC, (06/13–06/15) a youth-run organization providing leadership development.
Economic Intelligence Research Assistant for a start-up on mindfulness (2015).