

# 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** *CentraleSupélec, 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](https://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

**Algorithms:** 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 Symphony dataset.  
**ELF** (Python) Research code for image feature matching.  
**Scikit-learn** (Python) Functional tests.

## Leadership / Community Service

**Website Chair 3DV 2022**  
**Program Chair:** 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).