# Assia Benbihi

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nabenbihi.github.io

python, C++
github.com/abenbihi

#### **Education**

Georgia Tech Lorraine PhD in Computer Vision and Machine Learning (DREAM Lab)
Georgia Institute of Technology Master of Electrical and Computer Engineering

Telecom SudParis Master of Science in Telecommunication Engineering

Metz, France, 05/17-05/20 Atlanta, Georgia, 12/16 Paris, France, 06/15

#### **Publications**

An up-to-date list is available here.

Image-Based Place Recognition on Bucolic Environment Across Seasons From Semantic Edge Description A Benbihi, M Geist, C Pradalier, Preprint 2019

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, Preprint 2019

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

Learning Sensor Placement from Demonstration for UAV Networks A Benbihi, M Geist, C Pradalier, ISCC 2019

Automated segmentation and classification of land use from overhead imagery A Richard, A Benbihi, C Pradalier, V Perez, P Durand, R Van Couwenberghe, ICPA 2018

## **Work Experience**

Thales Software Engineer 05/17-

I develop a software solution to automate visual inspection on low-contrast images with few features (C++).

**Thales** Software Developer 02–04/17

I run functional tests using Robot Framework on a network monitoring software against security breaches.

**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**

#### Prix Andre Blanc-Lapierre; Prix Fondation Mines-Telecom 2nd

2016

I received a 3500€ fellowship that rewards the most innovative contributions of interns among French engineering schools.

#### **Software**

Nonexhaustive list of libraries/tools I have played with: OpenCV, Tensorflow, Numpy, Pytorch, COLMAP, Caffe, scikit-learn, ROS, Shell, UML, Enterprise Architect.

Open Source Contribution

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

Mater Student Project Manager I define and manage 2 weeks code-oriented research project related to computer vision and machine learning for master students at Georgia Tech Lorraine.

**Team manager**(06/13-06/15) AIESEC is the world's largest youth-run organization that provides young people with leadership development, cross-cultural internships, and volunteering experiences abroad.

- I led a 9-person team to develop the 1st edition of a global volunteering project in France. We provided 5 undepriviledged high schools with 9 international teaching assistants to bring cultural awareness among students.
- The next year, I recruited and trained 9 student volunteers for international interns head-hunting.

**Economic Intelligence Research Assistant** for a start-up on mindfulness. I experimented and gave feedback on innovative PNL workshops led by Jean-Maurice Bruneau (Associate Professor), involving Sun-Tsu art and self-defense.