Assia Benbihi

✉ abenbihi@georgiatech-metz.fr 📱 abenbihi.github.io
References: Cédric Pradalier, Matthieu Geist

python, C++
github.com/abenbihi

Education

CentraleSupelec, UMI2958 GeorgiaTech-CNRS *PhD, Computer Vision and Machine Learning* Metz, France, 05/20
Georgia Institute of Technology *Master of Electrical and Computer Engineering* Atlanta, Georgia, 12/16
Telecom SudParis *Master of Science in Telecommunication Engineering* 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, S Arravechia, 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 GeorgiaTech 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 under-
  privileged 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 in-
novative PNL workshops led by Jean-Maurice Bruneau (Associate Professor), involving Sun-Tsu art and self-defense.