Oriane Siméoni

Research interests

Computer vision, image representation, multimodal learning, machine learning.

Education

2016–2020 PhD researcher, Inria / Université de Rennes 1, Rennes, France.

Supervisors: Dr. Yannis Avrithis and Pr. Guillaume Gravier

Thesis: Robust image representation for classification, retrieval and object discovery

Publications: [1, 2, 3, 4, 5]

Reviewers: Pr. Patrick Pérez and Pr. Josef Sivic Jury members: Pr. Cordelia Schmid, Dr. Hervé Jégou,

Dr. Diane Larlus and Dr. Elisa Fromont

Dr. Ondřej Chum (invited)

Defense date: 10th of September 2020 (initially 31th of March 2020)

2015–2016 Master of Statistics and Business Intelligence, Paul Sabatier University, Toulouse, France.

2012–2015 **Engineer diploma in Telecommunications**, *Enseirb-Matmeca*, Bordeaux, France.

Research positions

March 2020-Aug. Research intern, Google, Grenoble, France.

2020 Supervisors: Pr. Cordelia Schmid and Dr. Chen Sun

Nov. 2018–Feb. Intern, Twitter / Magic Pony, London, England.

2019 Supervisors: Dr. Wenzhe Shi and Dr. Jose Caballero

April 2018-June Visiting Student, Center for Machine Perception, CVUT, Prague, Czech

2018 Republic.

Supervisor: Dr. Ondřej Chum

Publication: [3]

Feb. 2016-July Research Intern, Onera, Paris, France.

2016 Supervisors: Dr. Stéphane Herbin and Dr. Adrien Chan Hon Tong

Thesis: Scene representation through contextualization of object recognition algorithms

in images

June 2014-Sept. Research Intern, Institute for Advanced Biosciences, Keio University, Tsuruoka,

2014 Japan.

Supervisor: Dr. Kumar Selvarajoo

Thesis: Statistical analysis of genes expression

Publication: [6]

June 2013–July Research Intern, Humboldt University, Berlin, Germany.

2013 Supervisor: Pr. Andreas Griewank

Thesis: Development of an algebraic tool for Automatic Differentiation

Research collaborators

Google Cordelia Schmid, Chen Sun, Arsha Nagrani

Inria Yannis Avrithis, Guillaume Gravier, Ahmet Iscen, Ronan Sicre

Czech Technical Ondřej Chum, Giorgos Tolias

University

Onera Stéphane Herbin, Adrien Chan Hon Tong

Teaching experience

2017 Lectures and practicals, Teaching Assistant, INSA Rennes, France.

Algorithms and Programming I

2016–2017 Lectures and practicals, Teaching Assistant, INSA Rennes, France.

Introduction to Database

Working experience

Feb. 2015-Aug. Technical Intern, Intersec, Paris, France.

2015 Implementation of tools allowing the interoperability between the SNMP protocol and

the Intersec Object Packer technology

Awards

2019 ICVSS 2019 Best Presentation Award

2018 Guest invitation Google Computer Vision PhD Summit, Zurich

2017 VS3 Vision and Sports Summer School 2017 Best Poster Award

Summer schools

ICVSS 2019 International Computer Vision Summer School 2019. Sicily, Italy 7-13 July.

VS3 2017 Vision and Sports Summer School 2017. Prague, Czech Republic 21-26 August.

DS3 2017 Data Science Summer School 2017. Paris, France 28 August-1 September.

Languages

English Fluent TOEIC: 965/990 and IELTS: 7.0/9

Italian Intermediate B1 level

French Native

Computer skills

Programming Python, Matlab, C++, Java, R, Linux shell

Other Tensorflow, PyTorch, caffe, MatConvNet, scikit-learn, LATEX

Full list of publications

[1] O. Siméoni. Robust image representation for classification, retrieval and object discovery. PhD thesis, Inria, Université de Rennes 1, 2020.

- [2] O. Siméoni, M. Budnik, Y. Avrithis, and G. Gravier. Rethinking deep active learning: Using unlabeled data at model training. In *International Conference on Pattern Recognition (ICPR)*, 2020.
- [3] O. Siméoni, Y. Avrithis, and O. Chum. Local features and visual words emerge in activations. In *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, Long Beach, CA, US, 6 2019.
- [4] O. Siméoni, A. Iscen, G. Tolias, Y. Avrithis, and O. Chum. Graph-based particular object discovery. *Machine Vision and Applications (MVA)*, 2019.
- [5] O. Siméoni, A. Iscen, G. Tolias, Y. Avrithis, and O. Chum. Unsupervised object discovery for instance recognition. In *IEEE Winter Conference on Applications of Computer Vision (WACV)*, 2018.
- [6] O. Siméoni, V. Piras, M. Tomita, and K. Selvarajoo. Tracking global gene expression response in T cell differentiation. *Gene*, 2015.