Vasiliki Stergiopoulou

Curriculum Vitae

Education

Jan 2020– Dec 2022 (exp.)	**PhD in Automatic, Signal and Image Processing**, *Morpheme team (INRIA/CNRS/UCA)*. TITLE: Learning and optimization for 3D+T super-resolution in fluorescent microscopy DIRECTOR: Laure Blanc-Féraud, DR CNRS, Morpheme team CO-SUPERVISORS: Luca Calatroni, CR CNRS, Morpheme team & Sébastien Schaub, IR CNRS, LBDV
2013–2018	**BS & MS in Electrical and Computer Engineering**, *University of Patras*, Greece.
Feb–Jul 2017	**MS degree courses in Automation Engineering**, *University of Bologna*, Italy. In the framework of ERASMUS+, European Exchange Program

Research Experience

June 2022	**Visiting PhD Student**, *Cambridge Image Analysis (CIA) Group, DAMTP, University of Cambridge*. TITLE: Plug-and-Play Methods for Super-Resolution in Fluorescence Microscopy SUPERVISORS: Carola Bibiane Schönlieb, Subhadip Mukherjee
Dec 2018 – May 2019	**Internship**, *Laboratory of Biomedical Image Processing, EPFL*. TITLE: Solving Inverse Problems through Domain Decomposition SUPERVISORS: Michael Unser, Emmanuel Soubies
2017–2018	**BS & MS Thesis**, *Laboratory of Digital Signal and Image Processing, ECE Department, University of Patras*. TITLE: Synthetic Aperture Beamforming in Medical Ultrasound Imaging (link) SUPERVISOR: Athanassios Skodras

Honors and Awards

Mar 2022	**Best-Paper Runner-Up Award**, *IEEE 19th International Symposium on Biomedical Imaging (ISBI)*, Kolkata, India, (link).

Publications

2022	V. **Stergiopoulou**, L. Calatroni, H. de Morais Goulart, S. Schaub, and L. Blanc-Féraud, "Col0rme: Super-resolution microscopy based on sparse blinking/fluctuating fluorophore localization and intensity estimation," *Biological Imaging*, vol. 2, e1. DOI: 10.1017/S2633903X22000010.
	V. **Stergiopoulou**, L. Calatroni, S. Schaub, and L. Blanc-Féraud, "3D image super-resolution by fluorophore fluctuations and MA-TIRF microscopy reconstruction (3d-col0rme)," in *2022 IEEE 19th International Symposium on Biomedical Imaging (ISBI)*, pp. 1–4. DOI: 10.1109/ISBI52829.2022.9761572, **Best-Paper Runner-Up Award**.
2021	V. **Stergiopoulou**, J. H. d. M. Goulart, S. Schaub, L. Calatroni, and L. Blanc-Féraud, "COL0RME: Covariance-based l0 super-resolution microscopy with intensity estimation," in *2021 IEEE 18th International Symposium on Biomedical Imaging (ISBI)*, pp. 349–352. DOI: 10.1109/ISBI48211.2021.9433976.

Teaching

2020-2021	**IUT Nice Côte d'Azur**, *Côte d'Azur University*. -Initiation à la mesure du signal (Introduction to signal processing): 36h, -Acquisition et codage de l'information (Acquisition and coding of information): 24h.
2021-2022	**MSc in Data Science**, *Côte d'Azur University*. -Machine Learning in Image Analysis: 2h.

MSc in Data Science and Artificial Intelligence, *Côte d'Azur University*.
-Inverse problems in image processing: 6h.

IUT Nice Côte d'Azur, *Côte d'Azur University*.
-Signaux et Systémes pour les transmissions (Signals and Systems for Transmissions): 27h,
-Numérisation de l'information (Digitization of information): 27h.

Talks

Oct 2020	**Invited Oral Presentation**, *GdR MIA Thematic day on "Non-Convex Sparse Optimization"*, at ENSEEIHT, Toulouse, France, (link).
Oct 2021	**Oral Presentation**, *3IA PhD/Postdoc Seminar*, Online.
Dec 2021	**Oral Presentation**, *Micro-blind startup meeting*, at CIRM, Marseille, France, (link).
Mar 2022	**Oral Presentation**, *Journées Imagerie Optique Non Conventionnelle - 17ème édition (Non Conventional Optical Imaging Days - 17th edition)*, at Institut Langevin, Paris, France, (link).
Mar 2022	**Invited Oral Presentation**, *2022 SIAM Conference on Imaging Science* , Online, (link). **Recipient of Student Travel Award in the form of a registration waiver.**
Mar 2022	**Oral Presentation**, *IEEE 19th International Symposium on Biomedical Imaging (ISBI)*, Kolkata, India, (link).
June 2022	**Invited Oral Presentation**, *Cambridge Advanced Imaging Centre*, Cambridge, UK.
June 2022	**Invited Oral Presentation**, *MRC Laboratory of Molecular Biology*, Cambridge, UK.

Technical Skills

Programming	Matlab, Python (including PyTorch)
Tools	ImageJ/FIJI, LaTeX, Javascript

Languages

Greek	**Native**
English	**Fluent**
French	**B2 level**