

Identification

Cellphone: +352 661777787

Date of birth: November 10, 1982

Citizenship: Luxembourgish, Algerian, and Russian;

Languages: Arabic, English, French, Russian (Fluent);
German, Luxembourgish (Basic)

Relevant links: [Webpage](#), [RG webpage](#), [ORCID](#), [ResearchGate](#)

Other links : [GoogleScholar](#) , [LinkedIn](#) , [Twitter](#)

General: Computer Vision, Image Processing, Machine Learning, Artificial Intelligence

Focus: 3D Shape Modelling, Multi-modal Sensing, Geometric Deep Learning

Applications: Face Recognition, DeepFake Detection, Human Body Modelling, Space Situational Awareness

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|---|-------------------------------|
| University of Luxembourg, | Luxembourg, Luxembourg |
| Interdisciplinary Centre for Security, Reliability and Trust (SnT) | |
| <i>Acting Vice Director of the SnT Centre</i> | <i>06/2024 – present</i> |
| <i>Head of the Computer Vision, Imaging and Machine Intelligence (CVI²) Research Group</i> | <i>01/2020 – present</i> |
| <i>Senior Research Scientist / Assistant Professor</i> | <i>07/2020 – present</i> |
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| <i>Head of the SnT Space Zero-Gravity Lab</i> | <i>07/2021 – present</i> |
| <i>Head of the SnT Computer Vision Lab</i> | <i>03/2012 – present</i> |
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| <i>Research Scientist</i> | <i>07/2013 – 07/2020</i> |
| <i>Head of the Computer Vision team within the Signal Processing and Communications</i> | <i>07/2013 – 12/2019</i> |
| <i>(SigCom) Research Group of Prof. Björn Ottersten</i> | |
| <i>Research Associate</i> | <i>11/2009 – 06/2013</i> |
| Université de Bourgogne, Le2i | Le Creusot, France |
| <i>Lecturer</i> | <i>02/2012 – 02/2020</i> |
| Mitsubishi Electric Research Laboratories (MERL) | Cambridge, MA, USA |
| <i>Consultant</i> | <i>10/2014 – 03/2015</i> |
| University of Chicago, Dept. Of Radiology | Chicago, IL, USA |
| <i>Postdoctoral Fellow</i> | <i>06/2009 – 08/2009</i> |
| North Carolina State University, ECE Dept. | Raleigh, NC, USA |
| <i>Research Assistant</i> | <i>08/2005 – 05/2009</i> |
| Alcatel-Lucent Bell Laboratories | Murray Hill, NJ, USA |
| <i>Consultant</i> | <i>07/2008 – 10/2008</i> |
| North Carolina State University, ECE Dept. | Raleigh, NC, USA |
| <i>Teaching Assistant</i> | <i>01/2008 – 05/2008</i> |
| Los Alamos National Laboratory | Los Alamos, NM, USA |
| <i>Research Intern</i> | <i>06/2007 – 08/2007</i> |
| Schlumberger, Oil-field Services | Baku, Azerbaijan |
| <i>Field Engineer</i> | <i>08/2004 – 09/2004</i> |
| Centre de Développement des Technologies Avancées (CDTA) | Algiers, Algeria |
| <i>Research Intern</i> | <i>07/2003 – 08/2003</i> |

Education

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|--|---|
| North Carolina State University <i>PhD, Electrical Engineering, Computer Vision</i> <i>Thesis: Geometric, Statistical and Topological Modeling of Intrinsic Data Manifolds: Application to 3D Shapes</i> <i>Supervisor: Prof. Hamid Krim, IEEE Fellow</i> | Raleigh, NC, USA <i>08/2005 – 05/2009</i> |
| Ecole Nationale Polytechnique <i>Diplôme d'Ingénieur d'État (State Engineering Degree), Electronics, Signal Processing</i> <i>Thesis: Exploitation of Blind Techniques in MIMO-OFDM Communication Systems</i> <i>Supervisor: Prof. Adel Belouchrani, IEEE Fellow</i> | Algiers, Algeria <i>09/2000 – 06/2005</i> |

Managerial Responsibilities

2020 – Present: Founder and head of the CVI2 Department at SnT, and Member of the SnT Management Team at the University of Luxembourg.

2024 - present: President of the evaluation committee of the French CyberPEPR program (Programme et équipements prioritaires de recherche pour la cybersécurité), covering 10 projects for a budget of **65M€**.

2024 – Present: Board Director at the Asteroid Foundation

2023 – Present: Member of the Advisory Board of the Doctoral training center in Accountable, Responsible and Transparent AI (ART-AI) at the University of Bath, United Kingdom.

2023 – Present: Member of the Doctoral Program Committee in Computer Science and Computer Engineering (DP CSCE) at the University of Luxembourg.

2023 – Present: Member of the Algerian AI Board, Appointed by the Algerian Government

2023 – Present: Member of the Scientific Council of the National School of Artificial Intelligence, Ecole Nationale Supérieure d'Intelligence Artificielle (ENSIA), Algiers, Algeria.

May 2023: Member of the reviewing committee for faculty selection at INSA Rouen, France.

Professional Service and Editorial Responsibilities

2025: Area Chair at the International Conference on 3D Vision (3DV'25), 25-28 Mar. 2025.

2024: Area Chair at the European Conference on Computer Vision (ECCV'24), 29 Sep. – 4. Oct. 2024.

2024 - 2025: Associate Editor IEEE Transactions on Circuits and Systems for Video Technology.

2023: Program Chair at the IEEE/EURASIP European Workshop on Visual Information Processing (EUVIP'23), 11-14 Sep. 2023.

2022 – 2024: Expert evaluator – SMASH Marie Skłodowska Curie COFUND action.

2023: Evaluation Committee Member - Agence Nationale de la Recherche (ANR) – Grands Programmes d'Investissement de l'Etat - Cybersecurity.

2021 – 2022: Expert evaluator – Swiss National Science Foundation (SNSF).

2022: General co-Chair of the 5th International Conference on Recent Trends in Image Processing & Pattern Recognition (RTIP2R'22), 1-2 Dec. 2023.

2022: Area Chair at the International Conference on 3D Vision (3DV'22), 12-15 Sep., 2022.

2021: Program Chair at the International Conference on 3D Vision (3DV'21), 1-3 Dec., 2021.

2020: Area Chair at the International Conference on 3D Vision (3DV'20), 25-28 Nov., 2020.

2014 – 2016: Chair of the IEEE Benelux Women in Engineering Affinity Group.

2022 – Present: Associate Editor - IET Computer Vision

2020 – Present: Initiator and General Chair of the SHARP Workshops and Challenges – Shape Recovery from Partial textured 3D Scans.

Four editions have taken place. Each time in conjunction with top Computer Vision conferences (ECCV'20, CVPR'21, CVPR'22, ICCV'23). In addition to promoting research topics in 3D modelling, with a recent emphasis on 3D reverse engineering, we also prepare and share openly large annotated 3D datasets with the research community, namely, 1) 3DBodyTex Dataset – Textured 3D Body Dataset, with 3 different versions, 2) DermSynth3D – Synthetic images of skin lesions, 3) CC3D Dataset – CAD Construction in 3D, for pairs of CAD models and their scans, and 4) 3DObjectTex Dataset – Textured generic 3D Object dataset. All shared datasets are available here.

2021 – Present: Initiator and General Chair of the SPARK Challenges – SPacecraft Recognition leveraging Knowledge of Space Environment.

2021 – 2022: Expert Evaluator – Horizon European Innovation Council (EIC) - Pathfinder

2018 – 2020: Expert Evaluator – Horizon 2020 FET-OPEN

Awards and Distinctions

2018: Senior Member of the Institute of Electrical and Electronics Engineers (IEEE).

2017: Best Paper Award, IEEE 2017 Fourth International Conference on Image Information Processing (ICIIP), under the Computer Vision Track.

2017: 2nd Place Best Paper Award, IEEE International Conference on Image Processing (ICIP). Among 2400 submitted papers.

2015: Best Paper Award, IEEE Computer Vision and Pattern Recognition Workshop (CVPRW) on Multi-Sensor Fusion and Dynamic Scene Understanding (MSF).

2011: Student Best Paper Award at IEEE International Symposium on Image and Signal Processing and Analysis (ISPA).

2004: One of five students chosen nationwide for an international internship at a major oil company.

2003-2005: 2nd rank in Electronics at the École Nationale Polytechnique, the top engineering school in Algeria.

2000: Best student in the National Baccalaureate Exam over the Province of Blida, Algeria.

Achievements

2011 – 2024: Acknowledged in the media (The Scientist, The Guardian, Times Higher Education, RTL Radio, RTL TV).

2012: Established SnT as an associated partner of the Erasmus Mundus Master Program in Vision & roBOTics (VIBOT). In this capacity, SnT became member of the VIBOT consortium, and is allowed to participate in the Academic/Management Board, to submit proposals for internships and MSc theses.

2011: Founder of the Computer Vision Laboratory at SnT.

02/2009: PhD Defense at age 26.

09/2008 – 05/2009: PhD Research grant from the US Defense Threat Reduction Agency (DTRA).

03/2007 – 12/2007: PhD Research grant from the US Office of Naval Research (ONR).

2005 – 2009: Full PhD Scholarship through North Carolina State University Graduate Student Support Plan (GSSP).

1997 – 2000: Ranked first over the Province of Blida, Algeria, on both national exams; Baccalaureate and College exams.

Outreach Activities

2023 – 2026: Partner on the Deep Dive PSP Flagship Project of the Luxembourg Tech School, where the goal is to foster interest and knowledge in the field of AI among high school students.

June 2024: Workshop organizer on Augmented reality, Virtual Reality and AI in Space as part of the **Asteroid Day Festival 2024**.

2023 – Present: Regular hosting of high-school students for a discovery of research on AI and computer vision.

Oct. 2023: Lawyer role defending AI in a mock trial, "Tech Supreme Court – AI Edition", open to the large public organized by The Dots, a Luxembourg-based networking company.

May 2023: Speaker and panelist at a 2-day event organized by the FNR and the Luxembourgish Parliament on Megatrends.

2023 – Present: Speaker for the ESTEAM (Entrepreneurship, Science, Technology, Engineering, Arts and Mathematics) initiative carried out by the European Commission, EISMEA, Deloitte, and the European Women's Association with the goal to provide a supportive community to girls and women interested in developing their digital and entrepreneurial competences.

2022 – Present: Advisor in the SnT Gender Equality Working group.

2023 – Present: Mentor in the ADVANCE Mentoring Program, at the University of Luxembourg

2021 – 2022: An interdisciplinary two-year collaboration with artists, musicians, and scientists in the context of Esch22 – a national project celebrating the city of Esch as the European Capital of Culture in 2022 (<https://www.esch2022.lu>).

May 2021: Contributor to the award-winning FNR PSP project "La vie quotidienne en 2040, le point de vue de la science" at the high school Ecole Privée Notre-Dame Sainte-Sophie of Luxembourg.

2019 – 2022: Embedding of computer vision and AI tools at schools and bringing awareness on digital ethics to school students through a long-term project in partnership with the FNR, the Ministry of Education and a hub school (<https://smartschoul2025.uni.lu>).

2016 – 2020: Large national data collection campaigns coupled with communication with the public (<https://cvi2.uni.lu/datasets/>).

List of Research Projects

*Acting as PI. Acting as Vice PI where indicated with an asterisk *.*

FNR: Fonds National de la Recherche (Luxembourg Funding Agency)

ESA : European Space Agency

EDF : European Defence Fund

| Period | Project title | Amount | Source |
|-----------|---|--------|----------------------------|
| 2024-2026 | Unsupervised Domain Adaptation for Spacecraft Pose Estimation | 300 k€ | LMO |
| 2024-2026 | DIOSSA (Phase 2) – Deep Learning-based In-orbit Space Situational Awareness | 700 k€ | ESA |
| 2024-2026 | Model Optimization for Satellite Pose Estimation | 112 k€ | Infinite Orbits (Industry) |
| 2023-2025 | AI4CC – HPC and Advanced AI For Crop Classification Using High Resolution Satellites | 400 k€ | FNR (Joint HPC Call) |
| 2023-2026 | ENERGETIC – Next Generation Battery Management System Based On Data Rich Digital Twin | 500 k€ | Horizon Europe |
| 2023-2024 | ROBOCOMP – Robotic Process Automation in Anti-Money Laundering (AML) Compliance | 180 k€ | FNR (NCER) |
| 2023-2026 | AUREA – Autonomous Recognition of Foreign Assets | 700 k€ | FNR (Joint Defence Call) |
| 2023-2025 | SPRING – Space Response to Risk & Integration with Ground segment | 200 k€ | Subcontracting – EDF |
| 2022-2025 | ELITE – Deep Fake Detection Using Spatio-Temporal-Spectral Representations for Effective Learning | 750 k€ | FNR (CORE) |
| 2021-2023 | DIOSSA (Phase 1) – Deep Learning-based In-orbit Space Situational Awareness | 429 k€ | ESA (LuxImpulse) |
| 2021-2024 | CASCADES – Deep Constrained Sequence modelling of CAD for reverse Engineering from 3d Scans | 184 k€ | FNR Industrial Fellowship |
| 2022-2025 | FREE3D – Feature-based Reverse Engineering of 3D Scans | 400 k€ | FNR BRIDGES (Industrial) |
| 2021-2024 | UNFAKE – Deep Fake Detection Using Spatio-Temporal-Spectral | 184 k€ | FNR Industrial Fellowship |
| 2021-2022 | Zero-G Lab project | 180 k€ | Ministry of Economy |
| 2022-2025 | FakeDeTeR – Deep Fake Detection Using Spatio-Temporal-Spectral Representations for Effective Learning | 400 k€ | FNR BRIDGES (Industrial) |
| 2021-2024 | OBSERVE – On Board poSe Estimation of uncoopeRatiVe spacecraft through Ellipsoid modeling | 184 k€ | FNR Industrial Fellowship |
| 2021-2024 | Proving Digital Asset Integrity using DeepFake Detection | 393 k€ | POST Telecom (Industry) |
| 2021-2022 | Skytrust – Authenticate Digital Assets Using Space Data | 194 k€ | ESA |
| 2021-2022 | Remix Science: The Sound of Data | 37 k€ | Esch 22 |

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| 2020-2024 | Deep Learning of 3D Scanned Data | 808 k€ | ARTEC 3D (Industry) |
| 2021-2023 | MEET-A: Multi-modal Fusion of Electro-optical Sensors for Spacecraft Pose Estimation Towards Autonomous in-Orbit Operations | 400 k€ | FNR BRIDGES |
| 2020-2023 | DETECT: Towards edge-optimized deep learning for explainable quality control | 184 k€ | FNR Industrial Fellowship |
| 2020-2023 | Visual Quality Control in Manufacturing | 40 k€ | DataThings (Industry) |
| 2020-2020 | REST: Software for home-based REhabilitation of STroke survivors * | 45 k€ | FNR JUMP |
| 2020-2023 | Space Situational Awareness Instrumentation | 300 k€ | LMO (Industry) |
| 2019-2022 | Smart Schoul 2025: The Future Luxembourg Smart School | 399 k€ | FNR PSP-Flagship |
| 2018-2021 | IDform: Face Identification Under Deformations | 499 k€ | FNR CORE PPP |
| 2017-2020 | BodyFit: Accurate 3D human body shape modelling and fitting under clothing* | 184 k€ | FNR AFR PPP |
| 2017-2020 | AVR: Automatic Feature Selection for Visual Recognition* | 184 k€ | FNR AFR |
| 2016-2019 | 3D-Act: 3D Action Recognition Using Refinement and Invariance Strategies for Reliable Surveillance* | 732 k€ | FNR CORE |
| 2016-2019 | STARR: Decision Support and self-mAnagement system for stRoke survivoRs | 530 k€ | PHC EU H2020 |
| 2016-2020 | 3D Shape Modelling | 500 k€ | ARTEC 3D (Industry) |
| 2013-2015 | PROTECT: Prevention of Fraud by Pattern Detection in Credit Card Transactions * | 184 k€ | FNR AFR PPP |
| 2013-2015 | Body Shape Estimation via Intelligent Imaging* | 99 k€ | Cubelux Sarl (Industry) |
| 2012-2016 | Resilient Infrastructures for Financial Transactions* | 250 k€ | CETREL SIX (Industry) |
| 2011-2014 | FAVE: Fusion Approaches for Visual systems Enhancement* | 693 k€ | FNR CORE |
| 2011-2014 | Multi-Sensor Fusion* | 400 k€ | IEE S.A. (Industry) |

List of Taught Courses

| Period | Course | Program | Institution |
|---------------------------------------|--|---|--|
| Fall 2023, 2022, 2021, 2020 | Computer Vision & Image Analysis | <ul style="list-style-type: none"> Interdisciplinary Space Master (ISM) Master in Information and Computer Science (MICS) | Uni. of Luxembourg |
| Spring 2020, Spring 2019, Spring 2018 | Visual Perception (Image Filtering, Image Features, and Image Matching) | International Master in Vision and Robotics (VIBOT) | Uni. of Burgundy |
| Fall 2012, Fall 2013 | Advanced Image Analysis (Regularization, Non-local Means, Bilateral Filtering, Markov Random Fields) | International Master in Vision and Robotics (VIBOT) | Uni. of Burgundy |
| Fall 2012 | Robotics Projects | International Master in Vision and Robotics (VIBOT) | Uni. of Burgundy |
| Spring 2012 | Software Engineering | International Master in Vision and Robotics (VIBOT) | Uni. of Burgundy |
| Spring 2009 | Optimization | Graduate Course in Electrical and Computer Engineering (ECE) | North Carolina State University (NCSU) |
| Spring 2008 | Electrical Engineering for Non-Electrical Engineers | Undergraduate Course for non-Electrical Engineers | North Carolina State University (NCSU) |

Supervision

Overall Supervision in Numbers

| Team member | Number | Role | Status |
|---------------------|--------|--|---|
| PhD Candidates | 16 | Main Supervisor | 4 successfully completed, 10 ongoing, 2 joining |
| | 5 | Co-supervisor | 5 successfully completed |
| | 6 | Member of Supervisory/Evaluation Committee | 3 successfully completed, 3 ongoing |
| PostDoc Researchers | 28 | Main supervisor | 8 ongoing, 16 completed, 4 joining |
| Master Students | 16 | Main supervisor | 15 successfully completed, 1 joining |

Ongoing PhD Students

| Period | PhD Candidate | (Working) Title of Thesis | Supervisory Role | Funding |
|--------|---------------|---------------------------|------------------|---------|
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|-------------|------------------------|--|--------------------------|--------------------------------|
| 2024- today | Nidhal-Eddine Chenni | Unsupervised Domain Adaptation for Spacecraft Pose Estimation | Main Supervisor | Industrial |
| 2024-today | Nassim Ali Ousalah | Effective Model Compression Techniques for Spacecraft Pose Estimation | Main Supervisor | Industrial |
| 2023-today | Arthur Hubert | Using Neural Radiance Fields to improve Urban HD Maps (NeRF-Map) | Supervisory Committee | UL |
| 2023-today | Mohammad Sadil Khan | Feature-based Reverse Engineering of 3D Scans | Main Supervisor | UL |
| 2022-today | Romain Hermary | Leveraging Contextual Information for Efficient Dynamic Behavior Learning | Main Supervisor | FNR Joint Defence |
| 2022-today | Dat Nguyen | Deepfake detection using spatio-temporal and spectral representations in a deep learning framework | Main Supervisor | FNR Bridges |
| 2021-today | Tamara Roth | Management and governance of distributed ledgers and distributed identities | Supervisory Committee | UL |
| 2020-today | Ci Yang | Learning Effective Video Representation for Human Action Recognition | PhD Evaluation Committee | INRIA Inria, Univ. Côte d'Azur |
| 2022-today | Peyman Rostami | Disentangled representation learning for compact DNN design | Main Supervisor | FNR CORE |
| 2022-today | Ahmet Serdar Karadeniz | Deep Learning Approaches towards Automated Computer Aided Design (CAD) and Redesign | Main Supervisor | FNR Bridges |
| 2021-today | Nesryne Mejri | UNFAKE: Unsupervised multi-type explainable deepFAKE detection | Main Supervisor | FNR Industrial Fellowship |
| 2021-today | Elona Dupont | ConstrAined Sequence modelling of CAD for reverse Engineering from 3d Scans | Main Supervisor | FNR Industrial Fellowship |
| 2018-today | Kseniya Cherenkova | Automated CAD Re-engineering | Main Supervisor | Industrial (Part-time) |

Completed PhDs

| Period | PhD Candidate | Title of Thesis | Supervisory Role | Current |
|-----------|---------------------------|--|--|------------------------------------|
| 2020-2024 | Inder Pal | Vision-based Data-driven Models for Fashion Item Retrieval | Main supervisor | SnT – UL |
| 2020-2024 | Mohamed Adel | Vision-based Spacecraft Situational Awareness | Main supervisor | SnT – UL |
| 2021-2023 | Inès Jorge | Machine-learning based predictive maintenance for Lithium-Ion batteries in electric vehicles. | Member of Defense Committee | - |
| 2021-2023 | Nicolas Beuve | Deep Learning Based DeepFake Video Detection | Member of Defense Committee/ Rapporteure | INSA Rennes |
| 2021-2023 | Linda Weigl | Governance of Digital Identities | Member of Defense Committee/ Supervisory Committee | U. of Amsterdam |
| 2019-2022 | Tarek Ben Charrada | 3D object reconstruction from a single monocular image using Deep Learning | Member of Defense Committee/ Rapporteure | Reezocar |
| 2019-2022 | Benjamin Szczapa | Analysis and Prediction of Human Behavior Temporal Sequences in the Wild | Member of Defense Committee/ Rapporteure | - |
| 2019-2022 | Fitash Ul Haq | Scalable and Practical Automated Testing of Deep Learning Models and Systems | Chair of Defense Committee | SnT-UL |
| 2019-2022 | François Robinet | Minimizing Supervision for Vision-Based Perception and Control in Autonomous Driving | Member of Defense Committee | SnT-UL |
| 2017-2021 | Alexandre Saint | Automatic Analysis, Representation and Reconstruction of Textured 3D Huma Scans | Main supervisor | - |
| 2017-2021 | Renato Baptista | Context-based 3D Action Recognition | Main supervisor | Lunex |
| 2017-2021 | Mehrzi Sajad | Probabilistic Modeling for Content Popularity Learning For Proactive Caching | Chair of Defense Committee | SnT-UL |
| 2016-2020 | Ramiro Daniel Camino | Machine Learning Techniques for Suspicious Transaction Detection and Analysis | Supervisory Committee | LIST |
| 2017-2020 | Oyebade Oyedotun | Analyzing and Improving Very Deep Neural Networks: From Optimization, Generalization To Compression | Main supervisor | Spire |
| 2016-2020 | Konstantinos Papadopoulos | From Dense Trajectories to Sparse Trajectories for Action Recognition and Detection | Main supervisor | POST |
| 2017-2020 | Ashok Bandi | Joint Scheduling and Precoding in Wireless Networks: A DC Programming Approach | Chair of Defense Committee | SnT-UL |
| 2017-2019 | Jérémy Charlier | Big Data Analytics for Financial Data | Supervisory Committee | National Bank of Canada |
| 2016-2019 | Patrick Glauner | Artificial Intelligence for the Detection of Electricity Theft and Irregular Power Usage in Emerging Markets | Vice Chair of Defense Committee | Deggendorf Institute of Technology |

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|-----------|-------------------|--|---------------|-----------------------|
| 2014-2017 | Girum Demisse | Deformation-based Curved Shape Representation | Co-supervisor | Meta |
| 2012-2016 | Hassan Afzal | Full 3D Reconstruction of Dynamic Non-Rigid Scenes | Co-supervisor | Hexagon |
| 2012-2015 | Alejandro Correa | Example-Dependent Cost-Sensitive Classification | Co-supervisor | Cyxtera Tech. |
| 2011-2015 | Kassem Al Ismaeil | Super-Resolution Approaches for Depth Video Enhancement | Co-supervisor | Ministry of Education |
| 2009-2012 | Frederic Garcia | Sensor Fusion Combining 3D and 2D for Depth Data Enhancement | Co-supervisor | IEE |

Supervised Postdoctoral Researchers

| Period | Postdoc | University of PhD Degree | Current Position |
|----------------|------------------------|---|---------------------------|
| 2023 - present | Dimitrios Mallis | Leiden University | SnT, UL |
| 2023 - present | Marcella Astrid | University of Science and Technology, Daejeon | SnT, UL |
| 2022 - present | Matthieu Ruthven | King's College London | SnT, UL |
| 2022 - 2023 | Michele Jamrozik | Georgia Tech University | SnT, UL |
| 2022 - 2024 | Carl Schneider | Leiden University | SnT, UL |
| 2021 - 2022 | Kankana Roy | Indian Institute of Technology, Kharagpur | SnT, UL |
| 2021 - 2023 | Leo Pauly | University of Leeds | SnT, UL |
| 2021 - 2023 | Sk Ali Aziz | TU Kaiserslautern - DFKI | SnT, UL |
| 2021 - 2022 | Laura Lopez Fuentes | University of the Balearic Islands | - |
| 2021 - present | Arunkumar Rathinam | University of New South Wales | SnT, UL |
| 2021 - 2022 | Miguel Ortiz | University of Alcala | Uni. Of Melbourne |
| 2021 - present | Vincent Gaudillière | INRIA, Nancy | SnT, UL |
| 2020 - 2022 | Oyebade Oyedotun | University of Luxembourg | Spire |
| 2019 - present | Anis Kacem | University of Lille | SnT, UL |
| 2019 - 2021 | Kassem Al Ismaeil | University of Luxembourg | Ministry of Education |
| 2018 - 2019 | Rig Das | Roma Tre University | Technical Uni. of Denmark |
| 2018 - 2023 | Enjie Ghorbel | University of Normandie | SnT, UL |
| 2016 - 2020 | Abd El Rahman Shabayek | University of Burgundy | SnT, UL |
| 2017-2018 | Girum Demisse | University of Luxembourg | Meta |
| 2015-2017 | Michel Antunes | Coimbra University | Perceive 3D |
| 2012-2013 | Alexander Stojanovic | RWTH Aachen University | Luxembourg Administration |
| 2012-2014 | Frederic Garcia | University of Luxembourg | IEE |

Supervised Master Projects

| Year | MSc Student | Project title | Host University |
|------|----------------------|---|--|
| 2021 | Haytam Qadadri | Using event data for spacecraft pose estimation | University of Strasbourg |
| 2023 | Mohammed Elamine | Real-time Lidar SLAM on Embedded Platforms | University of Strasbourg |
| 2021 | Nesryne Mejri | Leveraging High-Frequency Components for Deepfake Detection | University of Luxembourg |
| 2021 | Elona Dupont | Music to Dance Leveraging 2D to 3D | University of Luxembourg |
| 2021 | Michele Jamrozik | Image Enhancement for Space Surveillance and Tracking | University of Luxembourg |
| 2020 | Sadiq Maculay | Recovering 3D Face Occlusions using Deep Generative Models for 3D Face Recognition | University of Burgundy |
| 2020 | Inder Pal | 3D human behavior understanding using deep neural networks and a single RGB camera | University of Burgundy |
| 2019 | Hamza Ben Abdessalem | Expression Invariant Face Recognition | Higher Institute of Multimedia Arts of Manouba |
| 2019 | Mohamed Adel | Vision-based temporal modelling and its application to action recognition from arbitrary viewpoints | University of Burgundy |
| 2018 | Cristian Porumb | Landmark detection on 3D human bodies using a coarse-to-fine segmentation | University of Luxembourg |
| 2018 | Himadri Pathak | View-invariant action recognition using RGB data | University of Luxembourg |
| 2015 | Daniel Barmaimon | Depth Video-Based Facial Emotion Analysis | University of Burgundy |
| 2013 | Kedidja Kadir Idris | Face recognition using a time-of-flight camera | University of Trento |
| 2013 | Lijia Gao | Depth single image super resolution by sparse coding | University of Burgundy |
| 2012 | Abdenmour Zeboudj | Representation of color information in 1 dimension | Ecole Nationale Polytechnique d'Alger |
| 2012 | Hashim Kemal Abdella | Enhancement of stereo sensing by fusion | Herriot Watt University |

List of Publications

Journals

1. N Mejri, L Lopez-Fuentes, K Roy, P Chernakov, E Ghorbel, D Aouada, Unsupervised anomaly detection in time-series: An extensive evaluation and analysis of state-of-the-art methods, Expert Systems with Applications, Vol. 256, 2024, 124922, ISSN 0957-4174,
2. IP Singh, E Ghorbel, O Oyedotun, D Aouada, Multi-label image classification using adaptive graph convolutional networks: from a single domain to multiple domains, Computer Vision and Image Understanding, vol. 247, 2024, 104062, ISSN 1077-3142

3. Jan Thoemel, Konstantinos Kanavouras, Maanasa Sachidanand, Andreas Hein, Miguel Ortiz del Castillo, Leo Pauly, Arunkumar Rathinam, Djamila Aouada, Lean Demonstration of On-Board Thermal Anomaly Detection Using Machine Learning, *Aerospace* 2024, 11, 523
4. Ashish Sinha, Jeremy Kawahara, Arezou Pakzad, Kumar Abhishek, Matthieu Ruthven, Enjie Ghorbel, Anis Kacem, Djamila Aouada, Ghassan Hamarneh, DermSynth3D: Synthesis of in-the-wild annotated dermatology images, *Medical Image Analysis*, Vol. 95, 2024, 103145, ISSN 1361-8415
5. L. Pauly, Wassim Rharbaoui, Carl Shneider, Arunkumar Rathinam, Vincent Gaudillière, Djamila Aouada, "A Survey on Deep Learning-Based Monocular Spacecraft Pose Estimation: Current State, Limitations and Prospects", *Acta Astronautica*, 2023.
6. L. Pauly, M. L. Jamrozik, M. Ortiz Del Castillo, O. Borgue, I. P. Singh, M. R. Makhdoomi, O. Christidi-Loumpasefski, V. Gaudillière, C. Martinez, A. Rathinam, A. Hein, M. Olivares-Mendez, D. Aouada, "Lessons from a Space Lab - An Image Acquisition Perspective", *Hindawi, International Journal of Aerospace Engineering*, Hindawi, 2023
7. J. Lorentz, T. Hartmann, A. Moawad, F. Fouquet, D. Aouada, Y. Le Traon. "CalcGraph: Taming the high costs of deep learning using models", *Journal of Software Engineering and Modelling*, Springer 2022
8. O. Oyedotun, K. Al Ismaeil, and D. Aouada. "Why is everyone Training Very Deep Neural Network with Skip Connections?", *IEEE Transactions on Neural Networks and Learning Systems*, 2021.
9. O. Oyedotun, K. Al Ismaeil, and D. Aouada. "Training Very Deep Neural Networks: Rethinking the Role of Skip Connections." *Neurocomputing* 441: 105-17 2021
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