Vivek Sharma

Curriculum Vitae

Gerwigstrasse 56
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https://web.media.mit.edu/~vvsharma

Work Experience

2019-Now **Distributed ML w/wo Privacy Concerns & AI for COVID-19 Research**.
Camera Culture Group, MIT Media Lab, Massachusetts Institute of Technology (**MIT**). Position: Researcher Employer: Prof. Ramesh Raskar.

2019-Now **Clinical and Translational Imaging**.
Massachusetts General Hospital (MGH). Harvard Medical School (HMS). Position: Researcher Employer: Dr. Rajiv Gupta.

2019-Now **Disease Outbreak Prediction in India**.
Machine Intelligence Lab at Boston Children Hospital. Harvard University, Medical School (HMS). Position: Research Affiliate. Faculty Host: Prof. Mauricio Santillana (HMS).

2020-Now **Unsupervised Image & Video Representation Learning**.
Institute for Anthropomatics and Robotics, CV:HCI Lab, Karlsruhe Institute of Technology (**KIT**). Position: Researcher Employer: Prof. Dr. Rainer Stiefelhagen.

2/20-03/20 **Research Visit, Project: Street2Shop**.
NAVER Labs, Grenoble. Position: Visiting Researcher. Employer: Naila Murray, Gabriela Csurka and Diane Larlus.

6/18-06/18 **Research Visit**.
University of Paris-Sud and LIMSI. Position: Visiting Researcher. Employer: Prof. Claude Barras, Asst. Prof. Camille Guinaudeau, Dr. Herve Bredin.

01/15-1/17 **EU Funded Project - ROVINA**.
Department of Electrical Engineering (ESAT) - Center for Processing Speech and Images (PSI), **KU Leuven**. Position: Research Assistant. Employer: Prof. Luc Van Gool, KU Leuven/ETH Zürich

11/11-10/12 **Project: ViMuDat**.
Visual Inspection Systems (SPR), **Fraunhofer IOSB**. Position: Research Associate. Employer: Prof. Dr. -Ing. Thomas Längle, Head of the Research Group.

08/11-10/12 **Project: CADaVISION (BMBF 01ISO9036B)**, *Link-to-PDF*.
Institute of Process Control, Automation & Robotics, Karlsruhe Institute of Technology(**KIT**). Position: Guest Researcher. Employer: Prof. Dr. -Ing. Heinz Wörn, Dean of Computer Science.

Education

03/17-5/20 **PhD Thesis: Self-supervised Face Representation Learning**, *Karlsruhe Institute of Technology (KIT)*, Prof. Dr. -Ing. Rainer Stiefelhagen (Computer Vision for Human-Computer Interaction, KIT), and Prof. Dr. -Ing Tamim Asfour (The Humanoid Robotics Systems - High Performance Humanoid Technologies Lab, KIT).
Ph.D. with Summa Cum Laude

09/12-06/14 **Color in Informatics and Media Technology (CIMET): Master of Science (M.Sc.)**, *I-Sem: University Jean Monnet,* FRANCE. *M.Sc. in "Optics, Image, Vision". II-Sem: University of Granada,* SPAIN. *M.Sc. in "Informatics & Media Technology". III-Sem: Norwegian University of Science and Technology,* NORWAY. *M.Sc. in "Applied Computer Science". IV-Sem: Karlsruhe Institute of Technology,* GERMANY. *"Master Thesis".*
CGPA - *7.8/10* with Distinction Marks (Honours), ECTS - *120*.

08/07-07/11 **Computer Science & Engineering: Bachelor of Technology (B.Tech.)**, *B.K. Birla Institute of Engineering and Technology (**BKBIET**)*, INDIA.
CGPA - *7.73/10* with First Division.

Academic Thesis & Project

Master

01/14-06/14 **Thesis:Training and Evaluation of a Framework for Pixel-wise Object Class Segmentation based on Synthetic Depth Data**, Project (KIT): **AMIKA**.
Karlsruhe Institute of Technology (KIT), Norwegian University of Science and Technology (NTNU), University of Oslo (UiO) and Oslo University Hospital HF. Supervisor: Prof. Dr. -Ing. Heinz Wörn (KIT) and Assoc. Prof. Dr. Şule Yildirim Yayilgan (NTNU) and Assoc. Prof. Dr. Ole Jakob Elle (UiO & Oslo University Hospital HF).

11/13-12/13 **Project: Hyperspectral Imaging Workflow & Encoding Standards**, *Link-to-PDF*.
Norwegian Colour and Visual Computing Laboratory, and NTNU. Position: Student Research Assistant. Supervsior: Prof. Jon Yngve Hardeberg

8/13-12/13 **Industrial Project: Waste sorting by Intelligent Machine Vision**, *Link-to-PDF*.
University of Easter Finland (UEF), Norwegian University of Science and Technology (NTNU), and ZenRobotics (Finland). Supervisor: Prof. Markku Hauta-Kasari & Prof. Jon Yngve Hardeberg.

8/13-11/13 **Project: Scene Understanding using Conditional Random Fields for Safe Human Robot Collaboration** , *Link-to-PDF*.
Norwegian Colour and Visual Computing Laboratory, UiO, and NTNU. Position: Student Research Assistant. Supervisor: Prof. Dr. Faouzi Alaya Cheikh

6/13-8/13 **Internship: Material identification in different weather conditions for unsupervised traffic control systems**, *Link-to-PDF*.
Color Imaging Lab, University of Granada (UGR), and Tecnalia Robotiker (Bilbao, Spain). Supervisor: Prof. Eva M. Valero (UGR).

2/13-6/13 **Project: 3D cloud maps**, *Link-to-PDF*.
Andalusian Center for Environmental Research (CEAMA), University of Granada (UGR), NASA AERONET (AErosol Robotic NETwork). Position: Student Research Assistant. Supervisor: Prof. Lucas Alados Arboledas, Head of the Atmospheric Physics Institute.

Bachelor

01/11-06/11 **Thesis: Gesture Recognition & Reproduction**.
B.K. Birla Institute of Engineering and Technology. Supervisor: Assoc. Prof. Lovendra Solanki, Dean of Electrical & Electronics Engineering Department.

Awards and Scholarships

2020 **Awarded Ph.D. with highest distinction: Summa Cum Laude**.

2019 **ICCV Student Award**.

2019 **Best Paper Award @ FG'19**.
Vivek Sharma, Makarand Tapaswi, M. Saquib Sarfraz, and Rainer Stiefelhagen. Self-Supervised Learning of Face Representations for Video Face Clustering. *In IEEE Automatic Face and Gesture Recognition (FG)*. http://fg2019.org/awards

2019 **Karlsruhe House of Young Scientist (KHYS) Scholarship**.
Awarded an amount of 7,250 Euros for my visit to Massachusetts Institute of Technology.

2018 **CVPR Student Volunteering Award**.

2017 **ICCV Student Volunteering Award (declined)**.

2013 **Appreciation**.
Overall topper of the 1st semester for the Master courses taken at the University of Jean Monnet.

2012 **European Commission Scholarship**.
Awarded an amount of 48,000 Euros for my Master program, selected among 500 candidates.

2011 **Appreciation**.
Among the top 10% out of 65 students graduated B.Tech in Computer Science, BKBIET.

Conference and Workshops Attended/Organized

All publications are peer-reviewed conference or journal publications and top tier in the respective field (computer vision, machine learning, robotics, intelligent vehicles). ICML, NeurIPs, ICCV, ECCV, FG and CVPR are highly competitive with acceptance rates of less than 30%. CVPR is the most highly cited IEEE conference with the highest impact in Engineering and Computer Science. CVPR, NeurIPs, ECCV, ICML, FG and ICCV are the most impactful conferences in computer science (*http://www.guide2research.com/topconf/*).

Publications: Conferences & Workshops

– COVID-19 Research

2021 arXiv Darshan Gandhi, Rohan Sukumaran, Priyanshi Katiyar, Alex Radunsky, Sunaina Anand, Shailesh Advani, Jil Kothari, Kasia Jakimowicz, Sheshank Shankar, Krutika Misra, Aishwarya Saxena, Sanskruti Landage, Richa Sonker, Parth Patwa, Aryan Mahindra, Mikhail Dmitrienko, Kanishka Vaish, Ashley Mehra, Srinidhi Murali, Rohan Iyer, Joseph Bae, **Vivek Sharma**, Abhishek Singh, Rachel Barbar, Ramesh Raskar. Digital Landscape of COVID-19 Testing: Challenges and Opportunities. *Under Review*

2021 arXiv Manuel Morales, Rachel Barbar, Darshan Gandhi, Sanskruti Landuge, Joseph Bae, Arpita Vats, Jil Kothari, Sheshank Shankar, Rohan Sukumaran, Himi Mathur, Krutika Misra, Aishwarya Saxena, Parth Patwa, Maurizio Arseni, Shailesh Advani, Kasia Jakimowicz, Sunaina Anand, Priyanshi Katiyar, Ashley Mehra, Rohan Iyer, Srinidhi Murali, Aryan Mahindra, Mikhail Dmitrienko, Saurish Srivastava, Ananya Gangavarapu, Steve Penrod, **Vivek Sharma**, Abhishek Singh, Ramesh Raskar. COVID-19 Tests Gone Rogue: Privacy, Efficacy, Mismanagement and Misunderstandings. *Under Review*

2020 arXiv Joseph Bae, Darshan Gandhi, Jil Kothari, Sheshank Shankar, Jonah Bae, Parth Patwa, Rohan Sukumaran, Sethuraman T. V., Krutika Misra, Srinidhi Murali, Aishwarya Saxena, KasiaJakimowicz, **Vivek Sharma**, Rohan Iyer, Ashley Mehra, Alex Radunsky, Priyanshi Katiyar, Sunaina Anand, Shailesh Advani, Jagjit Dhaliwal and Ramesh Raskar. Challenges of Equitable Vaccine Distribution in the COVID-19 Pandemic. *Under Review*

2020 arXiv Jay Luthar*, **Vivek Sharma***, Siddhant Gokhale, and Ramesh Raskar. COVID-driven Risk Profile. *Technical Report*.

2020 arXiv Ramesh Raskar, Dr. Ranu Dhillon, Dr. Suraj Kapa, Deepti Pahwa, Renaud Falgas, Lagnojita Sinha, Aarathi Prasad, Abhishek Singh, Andrea Nuzzo, Rohan Iyer, and **Vivek Sharma**. Comparing manual contact tracing and digital contact advice. *Under Review*

2020 Ramesh Raskar, Abhishek Singh, Khahlil Louisy, Sam Zimmerman, Ankit Ranjan, Aarathi Prasad, Deepti Pahwa, Shrikant Kanapart, Sheshank Shankar, and **Vivek Sharma**. Comparison of Co-location Technologies for Exposure Calculations in COVID-19. *Technical Report*.

* contributed equally to the work, and not in alphabetical order.

– Journals

2019 T-BIOM **Vivek Sharma**, Makarand Tapaswi, M. Saquib Sarfraz, and Rainer Stiefelhagen. Video Face Clustering with Self-Supervised Representation Learning. *IEEE Transactions on Biometrics, Behavior, and Identity Science (T-BIOM)*.

2018 IJRR **Vivek Sharma** and Sule Yildirim-Yayilgan. Real-time Holistic Scene Understanding using Single Depth Images for Safe Human-Robot Collaboration. Under Review, minor corrections.

2017 JIST-First CIC **Vivek Sharma**, Jon Yngve Hardeberg, Sony George. RGB-NIR Image Enhancement by Fusing Bilateral and Weighted Least Squares Filters. *In Journal for Imaging, Science & Technology (JIST-First) and Color and Imaging Conference (CIC),* ***Oral***.

– Conferences & Workshops

2021 arXiv Abhishek Singh, Ayush Chopra, **Vivek Sharma**, Ethan Garza, Emily Zhang, Praneeth Vepakomma, Ramesh Raskar. DISCO: Dynamic and Invariant Sensitive Channel Obfuscation for deep neural networks. *Under Review*

2020 NeurIPS Abhishek Singh, **Vivek Sharma**, Ayush Chopra, Praneeth Vepakomma and Ramesh Raskar. Dynamic Channel Pruning for Privacy. *In NeurIPS Workshop on Privacy Preserving Machine Learning,* ***Oral***.

2020 WACV **Vivek Sharma**, Naila Murray, Diane Larlus, M. Saquib Sarfraz, Rainer Stiefelhagen, and Gabriela Csurka. Unsupervised Meta-Domain Adaptation for Fashion Retrieval. *In IEEE Winter Conference on Applications of Computer Vision (WACV),* ***Oral***.

2020 FG **Vivek Sharma**, Makarand Tapaswi, M. Saquib Sarfraz, and Rainer Stiefelhagen. Clustering based Contrastive Learning for Improving Face Representations. *In IEEE Automatic Face and Gesture Recognition (FG)*.

2020 ECCV **Vivek Sharma***, Ali Diba*, Mohsen Fayyaz*, Manohar Paluri, Juergen Gall, Rainer Stiefelhagen, and Luc Van Gool. Large Scale Holistic Video Understanding. *In ECCV,* ***Oral***.

2020 arXiv Iker Ceballos, **Vivek Sharma**, Eduardo Mugica, Abhishek Singh, Alberto Roman, Praneeth Vepakomma, and Ramesh Raskar. SplitNN-driven Vertical Partitioning. *Under Review*.

2019 NeurIPS **Vivek Sharma**, Praneeth Vepakomma, Tristan Swedish, Ken Chang, Jayashree Kalpathy-Cramer, and Ramesh Raskar. ExpertMatcher: Automating ML Model Selection for Users in Resource Constrained Countries. *In NeurIPS Workshop on Machine learning for the Developing World (ML4D), Poster*.

2019 NeurIPS **Vivek Sharma**, Praneeth Vepakomma, Tristan Swedish, Ken Chang, Jayashree Kalpathy-Cramer, and Ramesh Raskar. ExpertMatcher: Automating ML Model Selection for Clients using Hidden Representations. *In NeurIPS Workshop on Robust AI in Financial Services: Data, Fairness, Explainability, Trustworthiness, and Privacy,* ***Oral***.

2019 ICCV **Vivek Sharma***, Ali Diba*, Luc Van Gool, and Rainer Stiefelhagen. DynamoNet: Dynamic Action and Motion Network. *In IEEE ICCV,* ***Oral***.

2019 ICCV **Vivek Sharma**, Makarand Tapaswi, and Rainer Stiefelhagen. Deep Multimodal Feature Encoding for Video Ordering. *In ICCV Workshop on Holistic Video Understanding (HVU),* ***Oral***.

2019 ACMMM Veith Röthlingshöfer*, **Vivek Sharma*** and Rainer Stiefelhagen. Self-Supervised Face-Grouping on Graphs. *In ACMMM,* ***Spotlight***.

2019 FG **Vivek Sharma**, Makarand Tapaswi, M. Saquib Sarfraz, and Rainer Stiefelhagen. Self-Supervised Learning of Face Representations for Video Face Clustering. *In IEEE Automatic Face and Gesture Recognition (FG),* ***Oral***. **Best Paper Award**.

2019 CVPR M. Saquib Sarfraz, **Vivek Sharma**, and Rainer Stiefelhagen. Efficient Parameter-free Clustering Using First Neighbor Relations. *In IEEE CVPR,* ***Oral***.

2019 CVPR **Vivek Sharma***, Ali Diba*, Rainer Stiefelhagen, Luc Van Gool. Weakly Supervised Object Discovery by Generative Adversarial & Ranking Networks. *In IEEE CVPR Workshop on Compact and Efficient Feature Representation and Learning in Computer Vision (CEFRL),* ***Oral***.

2018 CIC **Vivek Sharma***, Concong Wang*, Yu Fan, Faouzi Alaya Cheikh, Azeddine Beghdadi, Ole Jacob Elle, and Rainer Stiefelhagen. Can Image Enhancement be Beneficial to Find Smoke Images in Laparoscopic Surgery? *Color and Imaging Conference (CIC),* ***Oral***.

2018 ECCV Ali Diba, Mohsen Fayyaz, **Vivek Sharma**, Amir Hossein Karami, Rahman Yousefzadeh, Juergen Gall, Luc Van Gool. Spatio-Temporal Channel Correlation Networks for Action Classification. *European Conference on Computer Vision (ECCV), Poster*.

2018 CVPR **Vivek Sharma**, Ali Diba, Davy Neven, Michael S. Brown, Luc Van Gool, Rainer Stiefelhagen. Classification Driven Dynamic Image Enhancement. *In IEEE CVPR, Poster*.

2018 CVPR Ali Diba, Mohsen Fayyaz, **Vivek Sharma**, Amir Hossein Karami, Mohammad Mahdi Arzani, Rahman Yousefzadeh, Luc Van Gool. Temporal 3D ConvNets using Temporal Transition Layer. *In IEEE CVPR Workshop: Brave New Ideas for Video Understanding,* ***Oral***.

2017 CVPR **Vivek Sharma***, Ali Diba*, Luc Van Gool. Deep Temporal Linear Encoding Networks. *In IEEE CVPR, Poster*.

2017 CVPR Ali Diba, **Vivek Sharma**, Ali Pazandeh, Hamed Pirsiavash, Luc Van Gool. Weakly Supervised Cascaded Convolutional Networks. *In IEEE CVPR, Poster*.

2017 CVPR **Vivek Sharma**, Saquib M. Sarfraz, Rainer Stiefelhagen. A Simple and Effective Technique for Face Clustering in TV Series. *In IEEE CVPR Workshop: Brave New Motion Representations, Poster*.

2016 Tech. Report **Vivek Sharma**, Ali Diba, Tinne Tuytelaars, Luc Van Gool. Hyperspectral CNN for Image Classification & Band Selection, with Application to Face Recognition.

2016 arXiv-Link **Vivek Sharma**, Luc Van Gool. Does V-NIR based Image Enhancement Come with Better Features? *CoRR abs/1608.06521*.

2016 Tech. Report **Vivek Sharma**, Jose Antonio Oramas Mogrovejo. A Novel Approach for an Interactive Hyperspectral Image Segmentation.

2016 arXiv-Link **Vivek Sharma**, Luc Van Gool. Image-level Classification in Hyperspectral Images using Feature Descriptors, with Application to Face Recognition. *CoRR abs/1605.03428*.

2016 RO-MAN **Vivek Sharma**, Şule Yildirim-Yayilgan, Luc Van Gool. Low-Cost Scene Modeling using a Density Function Improves Segmentation Performance. *In IEEE RO-MAN,* ***Oral***.

2015 ICML **Vivek Sharma**, Şule Yildirim-Yayilgan, Frank Dittrich, Luc Van Gool. Efficient Real-Time Pixelwise Object Class Labeling for Safe Human-Robot Collaboration in Industrial Domain. *In ICML Workshop: Machine Learning for Interactive Systems,* ***Oral***.

2015 CVPR **Vivek Sharma**, Frank Dittrich, Şule Yildirim-Yayilgan, Luc Van Gool. Improving Human Pose Recognition Accuracy using CRF modeling. *In IEEE CVPR Workshops, Poster*.

2015 HCI **Vivek Sharma**, Frank Dittrich, Şule Yildirim-Yayilgan, Ali Shariq Imran, Heinz Wörn. How to tune a Random Forest for Real-Time Segmentation in Safe Human-Robot Collaboration? *In International Conference on HCI, Poster*.

2015 EMMCVPR **Vivek Sharma**, Frank Dittrich, Şule Yildirim-Yayilgan, Heinz Wörn. How does Energy Minimization Improve Recognizing Human Poses for Safe Human-Robot Collaboration? *In EMMCVPR, Poster*.

2014 ICNSC Frank Dittrich, **Vivek Sharma**, Heinz Wörn, Şule Yildirim-Yayilgan. Pixelwise Object Class Segmentation based on Synthetic Data using an Optimized Training Strategy. *In IEEE ICNSC,* ***Oral***.

2012 Tech. Report **Vivek Sharma**. CADaVISION: A Gesture Recognition Simulation. *Institute of Process Control, Automation & Robotics, Karlsruhe Institute of Technology*, Germany.

2012 Tech. Report **Vivek Sharma**, Dario Udovicic, Stevan Dordevic, Antonio Lucio. Sensor Fusion for Pedestrian Tracking. *Institute of Industrial Information Technology (IIIT), Karlsruhe Institute of Technology*, Germany.

Invited Talks

2020
- ExpertMatcher: Automating ML Model Selection w/wo Privacy Concerns. "*See below the skin*" *Computational Privacy Track, National Science Foundation*, Boston, USA.
- Video Understanding. Hosted by Hazim Kemal Ekenel. *Istanbul Technical University (ITU), Turkey* and *Ecole polytechnique Federale de Lausanne (EPFL), Switzerland*.
- Self-Supervised Face Representation Learning & Video Understanding. *Machine Learning Plus Online Program*, Beijing, China.

2019
- Recent Advances in unsupervised face representation learning and video understanding. Hosted by Ser-Nam Lim and Manohar Paluri. *Facebook*, Boston, USA.
- Recent Advances in Image and Video Representation Learning. Hosted by Patrick Buehler. *Microsoft*, Boston, USA.
- Unsupervised Representation Learning. *Harvard Medical School, Harvard University*, Cambridge, USA.
- Recent Advances in Video Understanding. Hosted by Alan Sullivan. *Mitsubishi Electric Research Labs (MERL)*, Boston, USA.
- Recent Advances in Video Understanding. Hosted by Hilde Kuehne. *MIT-IBM Watson Lab*, Boston, USA.
- Temporal 3D ConvNets. *In Advances in Imaging Course - MIT Professional Education*, Boston, USA.
- Self-supervised Face Representation Learning. Hosted by Samson Timoner. *ISM Connect*, Boston, USA.
- Temporal 3D ConvNets using Temporal Transition Layer. *In IEEE Computer Vision and Pattern Recognition (CVPR) Workshop on Compact and Efficient Feature Representation and Learning in Computer Vision*, Los Angeles, USA.
- Dynamic Image Enhancement. *Camera Culture Group, Massachusetts Institute of Technology*, Boston, USA.
- Self-Supervised Learning of Face Representations for Video Face Clustering. *In IEEE Automatic Face and Gesture Recognition*, Lille, France.
- Role of Multispectral Image Fusion for Vision Applications. *OCM SpectroNet Collaboration Conference 2019*, Karlsruhe, Germany.

2018
- Robust and effective feature representation for robotic and vision applications. Hosted by Anton Milan. *Amazon Research*, Berlin, Germany.
- Temporal 3D ConvNets using Temporal Transition Layer. *In IEEE Computer Vision and Pattern Recognition (CVPR) Workshop on Brave New Ideas for Video Understanding*, Salt Lake, Utah, USA.
- Unsupervised Feature Learning for Person Identification. Hosted by Herve Bredin, Camille Guinaudeau, and Claude Barras. *University of Paris-Sud and LIMSI*, Paris, France.
- The Choice is Yours: To Enhance or not To Enhance. Hosted by Florent Perronnin and Naila Murray. *NAVER Labs (previously Xerox R&D)*, Grenoble, France.

2017 Multi/Hyper-Spectral Imaging Applications in Computer Vision. *3rd Global Summit and Expo on Multimedia & Applications*, Lisbon, Portugal.

2016 Pose Estimation & Recognition. Hosted by Daniel Veithen. *Sony Depthsensing Solutions (previously SoftKinetic)*, Brussels, Belgium.

2015
- Efficient Real-Time Pixelwise Object Class Labeling for Safe Human-Robot Collaboration in Industrial Domain. *In International Conference on Machine Learning (ICML) Workshop on Machine Learning for Interactive Systems (MLIS)*, Lille, France.
- Multi/Hyper-Spectral Imaging Applications. *SpectroNet International Collaboration Forum*, Jena, Germany.
- Efficient Real-Time Pixelwise Object Class Labeling for Safe Human-Robot Collaboration in Industrial Domain. *KU Leuven*, Leuven, Belgium.

2014
- Scene Understanding using Conditional Random Fields for Safe Human Robot Collaboration. Hosted by Ole Jakob Elle. *University of Oslo and Oslo University Hospital*, Ullevål, Norway.
- Pixelwise Object Class Segmentation based on Synthetic Data using an Optimized Training Strategy. *In IEEE International Conference on Networks & Soft Computing*, Hyderabad, India.

2010 Radio Frequency & Identification. *Institute of Electronics & Telecommunication Engineers (IETE), BKBIET*, India.

Reviewer

- **Conference.** CVPR ('18,'19,'20,'21), ICCV ('19), ECCV ('18,'20), ICPR ('18), FG ('17,'18,'19,'20), GRSL ('16, '17), TBIOM ('19)
- **Workshop.** NeurIPS: AI for Social Good ('19,'20)

Program Committee

- **Conference.** AAAI ('20,'21)
- **Workshop.** CVPR: Brave New Motion Representations ('17), Large Scale Holistic Video Understanding (ICCV'19, CVPR'21), ICCV: Multi-modal Video Analysis and Moments in Time Challenge ('19,'20), ICLR Workshop on Distributed and Private Machine Learning ('21)
- **Tutorial.** CVPR: Large Scale Holistic Video Understanding ('20)

Mentor

- **Workshop.** ICLR: Tackling Climate Change with Machine Learning ('20,'21)

Conferences/Workshops/Summit/Courses Organized

06/21 CVPR **CVPR Workshop on Large Scale Holistic Video Understanding**.
To be held at Nashville, Tennessee, United States. Organizing with Ali Diba (KU Leuven, Sensifai), Mohsen Fayyaz (Uni. Bonn), Manohar Paluri (Facebook AI Research), David Ross (Google Research), Ehsan Adeli (Stanford University), Juergen Gall (Uni. Bonn), Rainer Stiefelhagen (KIT) and Luc Van Gool (ETH Zurich, KU Leuven).

05/21 ICLR **ICLR Workshop on Distributed and Private Machine Learning**.
To be held at Vienna, Austria. Organizing with Praneeth Vepakomma (MIT), Fatemehsadat Mireshghallah (UCSD), Ayush Chopra (MIT), Abhishek Singh (MIT), Adam Smith (Boston University), Ramesh Raskar (MIT), Gautam Kamath (University of Waterloo).

12/20 **The MIT "Vaccines For All" Conference**.
Held at Cambridge, USA. Organized with Ramesh Raskar (MIT), Sanjay Sarma (MIT), Jagjit Dhaliwal (MIT Sloan), Susan Blumenthal (formerly U.S. Department of Health and Human Services), and Shirley Bergin (formerly, TEDMED).

2020 **MIT Program for Trusted Pandemic Technologies.**.
Held at Cambridge, USA. Organized with Ramesh Raskar (MIT) and Colleagues.

2020 **MIT Global Ventures: Data & AI for Risilience after COVID19 ∼ Scale, Inclusion, Impact. 15.375 / EC.731 / MAS.665**.
Held at Cambridge, USA. Organized with Alex "Sandy" Pentland (MIT), Ramesh Raskar (MIT), Joost Bonsen (MIT) and Colleagues.

07/20 **Responsible Data Summit**.
Held at Berkeley, USA. Organized with Dawn Song (UC Berkeley), Ramesh Raskar (MIT), Evgenios M. Kornaropoulos (UC Berkeley), Abhishek Singh (MIT), Xiaoyuan Liu (UC Berkeley), Anne Fauvre (Oasis Labs), Moti Yung (Google), Andrew Trask (OpenMined), Richard Janda (University of Montreal), Yun William Yu (University of Toronto) and Alex Feerst (Responsible Data Foundation).

06/20 **CVPR Tutorial on Large Scale Holistic Video Understanding**.
CVPR Held at Seattle, USA. Organizing with Ali Diba (KU Leuven, Sensifai), Mohsen Fayyaz (Uni. Bonn), Manohar Paluri (Facebook AI Research), Juergen Gall (Uni. Bonn), Rainer Stiefelhagen (KIT) and Luc Van Gool (ETH Zurich, KU Leuven).

01/20 **MIT India Initiative - Design, Technology & Social Innovation Workshop**.
Held at Mumbai, India. Organizing with 30+ MIT and Harvard students.

10/19 **ICCV Workshop on Large Scale Holistic Video Understanding**.
Held at Seoul, Korea. Organizing with Ali Diba (KU Leuven, Sensifai), Mohsen Fayyaz (Uni. Bonn), Manohar Paluri (Facebook AI Research), Juergen Gall (Uni. Bonn), Rainer Stiefelhagen (KIT) and Luc Van Gool (ETH Zurich, KU Leuven).

7/19 **Advances in Imaging Course - MIT Professional Education**.
Lead Instructor: Ramesh Raskar. Helped with organizing hands-on experiments session on computer vision and deep learning. Held at MIT, Boston, USA.

08/02/16 **Annual Symposium in Optics**.
SPIE/OSA KU Leuven Student Chapter to be held on 8-9th Feb. 2016 in Leuven.

16/03/12 **IONS-Germany**.
Under the OSA KIT Chapter Student Branch OSKar.

5/09/10 **Green Earth**.
Under the IEEE BKBIET Chapter.

15/03/10 **Talk on Chandrayan II (Space Vehicle Flight & Launch)**.
Under the IEEE BKBIET Chapter Student Branch (Region 10).

Grants

10/19-10/20 **Research contract**, NAVER Labs Europe.

Member of Organizations

01/15-Now **Student Member**, CVF, Member of Computer Vision Foundation.
07/15-1/17 **Represented KU Leuven**, SpectroNet Cross-clustering Collaboration Forum.
03/15-09/16 **Vice-President**, SPIE, OSA, KU Leuven Chapter.
02/14-09/14 **Student Member**, Tekna, NTNU Chapter.
11/11-10/14 **Technical Leader**, OSKar(Optics Students Karlsruhe) KIT Chapter OSA, SPIE.
03/10-06/11 **Secretary**, IEEE BKBIET Chapter.
06/08-06/11 **Co-Founder, President**, Technorats, Technical Club, BKBIET.

Languages

English **Advanced**
German **Intermediate Level B1** *Conversationally fluent*
Norwegian **Basic** *Basic words and phrases only*

Letter of References

NAVER LABS **Dr. Gabriela Csurka Khedari** *Link-to-PDF*
NTNU **Assoc. Prof. Dr. Şule Yildirim-Yayilgan** *Link-to-PDF*

Fraunhofer	**Prof. Dr. -Ing. Thomas Längle**	*Link-to-PDF*
KIT	**Prof. Dr. -Ing. Heinz Wörn**	*Link-to-PDF*
BKBIET	**Assoc. Prof. Lovendra Solanki**	*Link-to-PDF*
BKBIET	**Assoc. Prof. Shridhar B. Dandin**	*Link-to-PDF*