

Institute for Infocomm Research (I2R)

Intelligent Systems

Name	Project	Degree By
Dr Li Xiaoli Adj A/Prof at NUS and NTU xlli@i2r.a-star.edu.sg	Big Data Analytics, Advanced Machine Learning, Social Network Analysis, Biological Network Analysis, Sensor Data Analytics, Insurance Data Analytics	NUS/NTU/SUTD
Dr Ng Wee Siong wsng@i2r.a-star.edu.sg	Data management, big data processing, stream processing	NTU/NUS/SUTD
Dr Wu Yan wuy@i2r.a-star.edu.sg	Human-robot Interaction; Assistive Robotics and Technology; Robot Skills Acquisition and Learning	NUS/NTU/SUTD
Dr Yau Wei Yun wyyau@i2r.a-star.edu.sg	Computer Vision, Biometrics, Medical Image, video analysis, Intelligent systems	NUS/NTU/SUTD
Tee Keng Peng kptee@i2r.a-star.edu.sg	Control theory, robotics, motor learning, brain-computer interface	NTU/NUS/SUTD
Wu Min wumin@i2r.a-star.edu.sg	Data Mining; Machine Learning; Bioinformatics	NTU/NUS/SUTD
Chen Fang Yih Nancy nfychen@i2r.a-star.edu.sg	Deep learning, natural language processing and understanding, speech recognition, information retrieval, dialogue modeling, artificial intelligence	NUS/SUTD
Dong Minghui mhdong@i2r.a-star.edu.sg	Speech Synthesis, Singing Synthesis, Voice Conversion, Natural Language Processing	NTU/NUS/SUTD
You Changhuai echyou@i2r.a-star.edu.sg	Speech & Speaker Recognition, Speech Enhancement, Language Recognition, Signal Processing	NTU/NUS/SUTD
Sun Hanwu hwsun@i2r.a-star.edu.sg	Robust speaker recognition, language recognition	NTU/NUS/SUTD
Chen Bin bchen@i2r.a-star.edu.sg	Natural Language Processing; Information Extraction; Named Entity Recognition Coreference Resolution; Discourse Relation; NLP Application on Social Media Texts	NTU/NUS/SUTD
Su Jian sujian@i2r.a-star.edu.sg	Information extraction, Sentiment Analysis, Natural Language Processing, Text Mining	NTU/NUS/SUTD
Ernest Kurniawan ekurniawan@i2r.a-star.edu.sg	Machine learning techniques for network optimization Intelligent agent for scheduling and resource allocation optimization in industrial environment	NTU/NUS/SUTD
Fong Wee Teck wtfong@i2r.a-star.edu.sg	Augmented Reality, Computer Vision	NTU/NUS/SUTD

Liu Siying Liusy1@i2r.a-star.edu.sg	Deep learning, Surveillance, Computational photography, 3D Vision	NTU/NUS/SUTD
Yeo Sze Ling slyeo@i2r.a-star.edu.sg	Coding Mathematics and Cryptography	NTU/NUS/SUTD
Su Le lsu@i2r.a-star.edu.sg	Applied cryptography, privacy preservation, blockchain	NTU/NUS/SUTD
Zheng Lilei Zhengll@i2r.a-star.edu.sg	Machine learning; image and speech processing; multimedia forensics	NTU/NUS/SUTD
Kim Jung Jae jjkim@i2r.a-star.edu.sg	Deep learning for dialogue understanding and language generation Semantic text analytics with knowledge engineering Bridging vision and language with deep learning Human-machine interaction with language understanding/generation	NTU/NUS/SUTD
Ramasamy Savitha ramasamysa@i2r.a-star.edu.sg	Deep Learning, Predictive Analytics, Online learning, Machine condition monitoring	NTU/NUS/SUTD
Liu Shudong liush@i2r.a-star.edu.sg	Dynamic stochastic Optimization, Deep neural networks, Integration of AI and OR	NTU/NUS/SUTD
Lin Jie lin-j@i2r.a-star.edu.sg	Hardware-Software co-optimization via Deep Learning	NTU/NUS/SUTD
Jin Chao Jin_Chao@i2r.a-star.edu.sg	Cryptography and Homomorphic Encryption, Machine Learning	NTU/NUS/SUTD
Zeng Zeng zengz@i2r.a-star.edu.sg	Deep Learning in Semicon Application	NTU/NUS/SUTD
Wang Anran wang_anran@i2r.a-star.edu.sg	Multimodal Deep Learning	NTU/NUS/SUTD
Khin Mi Mi Aung Mi_Mi_Aung@i2r.a-star.edu.sg	FHE/ SHE, Deep Learning meet Homomorphic Encryption	NTU/NUS/SUTD
Yang Huijuan HJYANG@I2R.A-STAR.EDU.SG	Advanced deep learning for medical image analysis, annotation, anomaly detection and interpretation Deep, Active and Transfer Learning applied to Medical Image Analysis Advanced machine learning methods for Neural and EEG Signal Decoding, research area: machine learning and Brain Machine (Computer) Interface.	NTU/NUS/SUTD
Xie Shoulie slxie@i2r.a-star.edu.sg	Deep Learning and Sparse Representation for Image Processing and Analysis	NTU/NUS/SUTD
Lu Zhongkang zklu@i2r.a-star.edu.sg	Medical Image Processing, Artificial Intelligence & Pattern Recognition	NTU/NUS/SUTD
Huang Weimin wmhuang@i2r.a-star.edu.sg	Machine learning and image processing for applications in medical imaging and analysis	NTU/NUS/SUTD

Zhang Zhuo zzhang@i2r.a-star.edu.sg	Deep Learning for BCI applications	NTU/NUS/SUTD
Ang Kai Keng kkang@i2r.a-star.edu.sg	Brain Machine Interface (BMI)	NTU/NUS/SUTD
Jaya Shankar s/o Pathmasuntharam jshankar@i2r.a-star.edu.sg	AI approaches for advance coordination and optimization of distributed traffic control Traffic Engineering & Distributed Optimization	NTU/NUS/SUTD
Luo Tie luot@i2r.a-star.edu.sg	Internet of Things, IoT analytics with machine learning; mobile crowdsourcing	NTU/NUS/SUTD
Dora Hu Juanjuan jjhu@i2r.a-star.edu.sg	Fundamental research in photonics and optics. Specifically, optics of photonic crystals, microstructure d optical fiber (MOF) and MOF-based devices for telecommunic ations and sensors applications	NTU/NUS/SUTD
Zhu Yongwei ywzhu@i2r.a-star.edu.sg	Signal processing and data analytics for IoT	NTU/NUS/SUTD
Cheng Jierong guy@i2r.a-star.edu.sg	Connecting deep learning with variational models	NTU/NUS/SUTD
Xiong Wei wxiong@i2r.a-star.edu.sg	Weak visual signal detection and segmentation; Interactive image segmentation; Complex scene analysis and partial object recognition; Unbiased defromable shape modeling; 3D computer vison and surface reconstruction	NTU/NUS/SUTD
Zhu Hongyuan zhuh@i2r.a-star.edu.sg	Deep Learning, Computer Vision, Image Processing	NTU/NUS/SUTD
Gu Ying guy@i2r.a-star.edu.sg	Deep learning approach based on variational models	NTU/NUS/SUTD
Wan Kong Wah kongwah@i2r.a-star.edu.sg	Interactive perception for mobile robots	NTU/NUS/SUTD
Li Jun jli@i2r.a-star.edu.sg	Interactive perception for Robot Manipulation	NTU/NUS/SUTD
Albertus H. Saputra adiwahonoah@i2r.a-star.edu.sg	Humanoid Robot Control, Robot Navigation, Intelligence Component of Robot	NTU/NUS/SUTD
Nasimuddin nasimuddin@i2r.a-star.edu.sg	Antenna, Matematerial antenna	NTU/NUS/SUTD
Chua Yam Song chuays@i2r.a-star.edu.sg	Learning algorithms in spiking neural networks	NTU/NUS/SUTD

Interactive & Digital Media

Name	Project	Degree By
Dr Li Zhengguo ezgli@i2r.a-star.edu.sg	Image and video processing and delivery, QoS, Switched and impulsive control	NUS/NTU/SUTD
Wu Kui wuk@i2r.a-star.edu.sg	Deep learning for dialogue systems. Contextual language understanding	NTU/NUS/SUTD
Tran Huy Dat hdtran@i2r.a-star.edu.sg	Far-field automatic speech recognition, noise reduction and echo cancellation, voice analytic, sound event detection and localization, compressed deep learning, neuromorphic algorithms	NTU/NUS/SUTD
Ernest Kurniawan ekurniawan@i2r.a-star.edu.sg	Interactive and immersive visualization in data analytics and its application to industrial process automation	NTU/NUS/SUTD
Shu Haiyan hshu@i2r.a-star.edu.sg	Multimedia Signal Processing & Data Analytics	NTU/NUS/SUTD
Xu Qianli qxu@i2r.a-star.edu.sg	Human-robot interaction in collaborative AI	NTU/NUS/SUTD
Ng Suat Ling Jamie jamie@i2r.a-star.edu.sg	Human-Computer Interaction, Human Factors, Wearable Augmented Reality, Cognitive Psychology, Computer Vision, Computer Graphics	NTU/NUS/SUTD

Wireless Communication

Name	Project	Degree By
Sun Sumei sunsm@i2r.a-star.edu.sg	5G and beyond; Industrial IoT; Cognitive communications & Networks; Machine-learning in wireless communications; Communications-computing-control integrative design; Cyber physical systems	NTU/NUS/SUTD
Sivanand s/o Krishnan sianand@i2r.a-star.edu.sg	Indoor Localization	NTU/NUS/SUTD
Zhang Peng zhangp@i2r.a-star.edu.sg	Machine Learning and Sparse Signal Processing for IoT	NTU/NUS/SUTD
Ernest Kurniawan ekurniawan@i2r.a-star.edu.sg	Massive antenna systems and massive asynchronous machine type communications Low latency and reliable communications in 5G networks	NTU/NUS/SUTD
Guo Huaqun guohq@i2r.a-star.edu.sg	Network and Communication Security, Cyber-Physical Security, Secure Urban Transportation, Internet of Things (IoT) Security, Industrial IoT Security, Quantum Cryptography, Blockchain	NTU/NUS/SUTD
Zeng Yonghong yhzeng@i2r.a-star.edu.sg	Wireless communication and network, IOT	NTU/NUS/SUTD
Emily Hao Jianzhong haoemily@i2r.a-star.edu.sg	Fiber Optic Sensors, Bio-sensors	NTU/NUS/SUTD
Peng Xiaoming pengxm@i2r.a-star.edu.sg	Wireless communication, Satellite-based Communications	NTU/NUS/SUTD

Computer Science

Name	Project	Degree By
Dr LIM Joo Hwee Adj A/Prof at SCE, NTU jooHwee@i2r.a-star.edu.sg	Representation and Learning in Computer Vision; Multimedia Indexing, Retrieval and Fusion; Pattern Recognition	NTU/NUS/SUTD
Liu Guimei liug@i2r.a-star.edu.sg	Frequent pattern mining, association rule mining, exploratory hypothesis testing; recommendation systems	NTU/NUS/SUTD
Kanagasabai Rajaraman kanagasa@i2r.a-star.edu.sg	High-dimensional data search, hardware-based fuzzy search, multimedia fingerprinting, formerly Voice over IP	NTU/NUS/SUTD
Xue Yang xuey@i2r.a-star.edu.sg	The application of machine learning in semiconductor, manufacturing and engineering domains	NTU/NUS/SUTD
Xiang Shili sxiang@i2r.a-star.edu.sg	Spatio-Temporal Data Analysis, Time-series Data Analysis, Anomaly Detection	NTU/NUS/SUTD
Hai Zhen haiz@i2r.a-star.edu.sg	Text mining, natural language processing, machine learning	NTU/NUS/SUTD
Foo Chuan Sheng foocs@i2r.a-star.edu.sg	Unsupervised/Semi-supervised deep learning Combining graphical models with deep learning Deep learning for precision medicine	NTU/NUS/SUTD
Vijay Chandrasekhar vijay@i2r.a-star.edu.sg	Deep learning and computer vision	NTU/NUS/SUTD
Shen Li lshen@i2r.a-star.edu.sg	Computational photography, Image processing, Deep Learning	NTU/NUS/SUTD
Ramanpreet Singh Pahwa ramanpreet_pahwa@i2r.a-star.edu.sg	Computer Vision in relation to Deep learning, Co-integration of Robotics with Deep Learning and Vision Application.	NTU/NUS/SUTD
Pavitra Krishnaswamy pavitrak@i2r.a-star.edu.sg	integration of bayesian methodologies with deep learning; white-box deep learning; next generation deep learning for biomedical imaging; predictive analytics for multimodal and/or non-stationary biomedical data; advanced methods for personalized clinical decision support	NTU/NUS/SUTD
Zhang Haihong hhzhang@i2r.a-star.edu.sg	Brain-Computer Interface and Applications	NTU/NUS/SUTD
Zheng Jinghong jzheng@i2r.a-star.edu.sg	Signal processing, High dynamic range image, Video processing, Energy system modelling, optimisation & data analytics	NTU/NUS/SUTD
Pham Nam Trung ntpham@i2r.a-star.edu.sg	Object Detection/Tracking and Deep Learning	NTU/NUS/SUTD
Li Liyuan lyli@i2r.a-star.edu.sg	Computer vision, image processing, pattern recognition, multimedia, artificial intelligence, cognitive vision, robotics	NTU/NUS/SUTD

Chen Wenyu chenw@i2r.a-star.edu.sg	Deep learning for feature detection and measurement from 3D point clouds	NTU/NUS/SUTD
Ma Tin Lay Nwe tlnma@i2r.a-star.edu.sg	Visual object search, retrieval and visualization using deep learning	NTU/NUS/SUTD
Wang Jiangan jgwang@i2r.a-star.edu.sg	Computer vision, Pattern Recognition, Human Computer Interaction, Biometrics	NTU/NUS/SUTD
Jiang Wenyu wjjiang@i2r.a-star.edu.sg	Hardware-assisted machine learning, high-dimensional data search, hardware-based fuzzy search, multimedia fingerprinting, formerly Voice over IP	NTU/NUS/SUTD
Fong Wee Teck wtfong@i2r.a-star.edu.sg	Augmented Reality, Computer Vision	NTU/NUS/SUTD
Liu Siying Liusy1@i2r.a-star.edu.sg	Deep learning, Surveillance, Computational photography, 3D Vision	NTU/NUS/SUTD

Biomedical Engineering

Name	Project	Degree By
Pavitra Krishnaswamy pavitrak@i2r.a-star.edu.sg	integration of bayesian methodologies with deep learning; white-box deep learning; next generation deep learning for biomedical imaging; predictive analytics for multimodal and/or non-stationary biomedical data; advanced methods for personalized clinical decision support	NTU/NUS/SUTD
Rosa Qi Yue So rosa-so@i2r.a-star.edu.sg	Brain Machine Interface (BMI), Neural decoding, Neuromodulation	NTU/NUS/SUTD
Yang Tao tyang@i2r.a-star.edu.sg	Robotics and BCI Techniques integration	NTU/NUS/SUTD