

Advanced Remanufacturing and Technology Centre (ARTC)

Additive Manufacturing Industrialisaiton

Name	Project	Degree By
Le Hong Quang Scientist Le_Hong_Quang@artc.a-star.edu.sg	Functionally graded materials and lattice structures	
Raghavan Srinivasan Advanced Development Scientist Srinivasan_Raghavan@artc.a-star.edu.sg	Design of specific alloys and single crystals for additive manufacturing	
Samudrala Saritha Kowmudy Developent Scientist Saritha_Samudrala@artc.a-star.edu.sg	Tailoring of microstructures for improvement of fatigue and creep performance	
Niaz Ahmed Khan Team Lead Niaz-khan@artc.a-star.edu.sg	3D printing of sustainable polymers	
Shashwat Shukla Advanced Development Scientist shashwat_shukla@artc.a-star.edu.sg	Development of additively manufactured high-energy product permanent magnets	

Advanced Robotic Applications

Name	Project	Degree By
Alberto De San Advanced Development Scientist albertodsbc@artc.a-star.edu.sg	1. Remote Operation of Robots in Complex Environments 2. Variable Stiffness Gripper Development 3. Indoor Flying Manipulator	
Nikhil Somani Advanced Development Scientist nikhil_somani@artc.a-star.edu.sg	1. Grasp planning with machine learning 2. Motion planning and control for mobile manipulators	

Bai Fengjun Advanced Development Scientist bai_fengjun@artc.a-star.edu.sg	Object detection, recognition and robotic manipulation	
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Data-Driven Surface Enhancement

Name	Project	Degree By
Kum Chun Wai Team Lead kumcw@artc.a-star.edu.sg	1. Process modelling and simulation for AFM – fundamental study 2. Microrobot polishing	
Dennise Ardi Deputy Group Manager denniseta@artc.a-star.edu.sg	Surface microstructure engineering for enhanced resistance to fatigue damage	
Niroj Maharjan Development Scientist maharjan_niroj@artc.a-star.edu.sg	Laser-assisted processing for improved surface integrity of machine components	
Ampara Aramcharoen Group Manager amparaa@artc.a-star.edu.sg	Process monitoring for surface enhancement processes	

Advanced Remanufacturing

Name	Project	Degree By
Alin Patran Deputy Group Manager alin_patran@artc.a-star.edu.sg	Special materials and applications using reactive materials technology (in-situ reactions, in-situ alloying, etc.)	
Aravind Raghavendra Advanced Development Scientist aravindr@artc.a-star.edu.sg	1. Development of Sensorized Tooling Technologies 2. Application of Actuated Tooling in Machining Processes	
Yang Shanshan Development Scientist yangs@artc.a-star.edu.sg	Evaluate risks and benefits of using rebuilt Tunnel Boring Machines in Singapore, from a commercial and sustainability environmental point of view	

Intelligent Product Verification (Condition Monitoring)

Name	Project	Degree By
Jacek Kaminski Section Manager Jacek-Kaminski@artc.a-star.edu.sg	Machine Condition Failures Characterization, Detection and Prediction using AI	

Intelligent Product Verification

Name	Project	Degree By
Cheng Fang Group Manager chengf@artc.a-star.edu.sg	Multi-scale Approach to Large Area Surface Roughness Measurement	
Andrew Malcolm Deputy Group Manager andrew_malcolm@artc.a-star.edu.sg	UT Inspection of 3D Anisotropic Metals in Additive Manufacturing using TFM	
Cheng Fang Group Manager chengf@artc.a-star.edu.sg Andrew Malcolm Deputy Group Manager andrew_malcolm@artc.a-star.edu.sg	On-line High-speed High-Resolution Characterisation for Structured Surfaces	

Smart Manufacturing Group

Name	Project	Degree By
Bao Huy Huynh Advanced Development Scientist huynh_bao_huy@artc.a-star.edu.sg	Swarm Intelligence based layout and schedule optimization	
Humza Akhtar Section Manager Humza-akhtar@artc.a-star.edu.sg		
Farzam Farbiz Senior Technical Lead farzam_farbiz@artc.a-star.edu.sg	Cognitive analytics for manufacturing	
Farzam Farbiz Senior Technical Lead farzam_farbiz@artc.a-star.edu.sg Vigneashwara Pandiyan Development Scientist Vigneashwara_Pandiyan@artc.a-star.edu.sg	Machine learning methods for AM line product quality estimation	
Alejandro Seif Development Scientist alejandro_seif@artc.a-star.edu.sg	IoT and Edge computing for seamless manufacturing assets connectivity in the factory of the Future	

Alireza Alghassi Development Scientist alireza_alghassi@artc.a-star.edu.sg	Analytic automation for monitoring and root cause analysis of system process and product quality	
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