

Details of Recruitment Areas of Samsung Electronics Global Tech. Center

| Technical Area | Application Area | |
|--|---|---|
| Manufacturing Process Technology | Metal | Machining Process Planning, CAM, Cutting Tool Design, Precision Machining, Cutting Mechanism Simulation, Metal Surface Patterning, Metal Surface Finishing (Coating, Etching, Plating, etc), Anodizing |
| | Glass Processing/Molding | Glass Laser Processing, 3D Thermoforming, Large-area Molding, Glass Powder Molding, Glass Tempering , Development of Glass Replacing Material, CAE Analysis & Test, Property Measurement, Defect Inspection, Strength Test |
| | Part Processing/Molding Technology | Precision Machining Technique(CNC, Laser Processing, Hard-slicing Material Processing), Metal Molding Tech. (Press, Deep Drawing, Die-Casting), Injection Molding Tech. (Low pressure Molding, Metal Powder Injection) |
| | Functional Material & New molding method | Functional Materials, Manufacturing Process/Method Development of Ultra-precision Composite Parts (Composite materials such as CFRP) |
| | Laser / Optics | High-functional Optical Design & Metal Mold Design/Processing/Test/Mass Production tech., Development/Realization Tech of Lighting with Differentiated Design. |
| Core Technology | Interconnection & Packaging Technology | High Density Stacking for Slim/Wearable Products / Design Tech., Micro Joining to Secure Manufacturing Competitiveness of Products & Parts , Material Analysis/Test to Secure the Quality of Materials & Parts, Reliability Test-Design of Mobile Products |
| | Mechanical Simulation Design | High Speed Signal Design for Electromagnetic Wave/GHz High-Speed Signal Transmission, Product ESD Analysis/Design, Manufacturing EOS/ESD Measurement & Analysis, Low Power Analysis/Design for Heat Reduction & Increase of the Usage, Sensor Application Circuit, Actuator, Haptic Display Design |
| | Electrical Simulation Design | Structure Optimization Design/Low Vibration Design, User-oriented Design(Ergonomics-based PUI Design, Sound Quality Improving Design), Optimal Process Design (Processing Analysis/Optimization Design Tech., Nondestructive Measurement Tech., Reverse Engineering Design), Heat Transfer/Flow Optimization Tech. |
| | CMF(Color, Material, Finishing) | Material/Processing /Design Tech. for Realizing the Color, Special Material Application/Material Analysis Tech., Surface Treatment Tech. |
| Robot & Automation Technology | Robotics | Precision/Dual Arm Manipulation, Cooperative Control, Grasping, Humanoid/Navigation, Redundancy Resolution |
| | Motion Planning / Control | Task/Path Planning, Failure Recovery, Force/Impedance Control, Semantic Mapping |
| | Machine Learning(S/W) | Modeling, Optimization, Supervised/Unsupervised/Deep Learning, Scene Understanding, Reinforcement Learning, Robotic OS(Operating System), Middle Ware, Real-time Control(Linux, Windows) |
| | Machine Vision | Object Recognition, 3D Vision, Image Analysis, Defect Detection |
| | Mechanism | Mechanism Kinematics, Dynamics, Design, Analysis, Synthesis |
| | Signal Processing | Precision Analog Circuit, Digital Signal Processing, Adaptive Filters, Information Feature Extraction from Signal, Noise/Vibration Test/Analysis, Sound Quality Functions, Fault Detection with Vibration/Sound Signal. |
| Manufacturing System & S/W Technology | Big Data | Equip.'s Big Data (text, signal, video) Processing/Analysis, Analysis of Correlation btw Manufacturing Process & Quality of Products, Time series analysis and Data Visualization, Multi-linear subspace learning, Massively Parallel-Processing Databases, Distributed file systems, distributed databases, cloud based infrastructure (applications, storage and computing resources) |
| | Digital Manufacturing | Equip.'s Big Data (text, signal, video) Processing/Analysis, Analysis of Correlation btw Manufacturing Process & Quality of Products, Factory Layout & Logistics Simulation Test/Optimization, Automated Equip. Simulation/Test, Ergonomics-based Work/Productivity Test, Optimization |
| | Process Monitoring & Control S/W | Development of Processing/Equip. Engineering & Optimal S/W, Development of Measuring/Test/Control Automation S/W , Optimal Data Communication Design btw Different Model Equips – Computers , Micro-sensor Design & IoT/M2M Firmware Development |
| | Optimal Design & Test of S/W | S/W Product Line Engineering & S/W Platform Development, S/W Architecture Analysis & Test, S/W Reengineering/Refactoring & S/W Quality Optimization |
| | Manufacturing Info. System | Cloud Computing-based User Experience Design, Optimal Design & Tuning of Massive Database, Optimal Logistics Control (Scheduling & Dispatching) |