Nael Abu-Ghazaleh (University of Cincinnati): Computer systems (computer architecture support for security, networking, and distributed systems). Parallel computing.
Matthew Barth (UC Santa Barbara): Transportation systems and automation technology, and their relationship with energy and air quality issues.
Xi Chen (University of Texas at Austin): Nanoscale materials, devices, and circuits. Advanced materials and devices for spin caloritronics, thermoelectrics, thermal management, and lithium ion batteries.
Ran Cheng (University of Texas at Austin): Fundamental physics and innovative applications in antiferromagnetic thin films and nanostructures.
Basak Guler (Pennsylvania State University): Developing scalable, privacy-preserving, and context-aware communication and information processing frameworks for large-scale distributed networks.
Yingbo Hua (Syracuse University): Signal processing, wireless communications, and sensor networks.
Konstantinos Karydis (University of Delaware): Modeling and control of nonlinear uncertain and stochastic systems, uncertainty quantification and probabilistic model validation. Motion planning, navigation, and control of underactuated legged and aerial robots under uncertainty.
Hyoseung Kim (Carnegie Mellon University): Multi-Core OS and virtualization for Embedded and Cyber-Physical systems.
Roger Lake (Purdue University): Nanoelectronics, molecular electronics, photovoltaics, and sensing. Electron transport through nanostructured materials and interfaces. Electronic functionality from atomistic structure.
Jianlin Liu (UC Los Angeles): Zinc-Oxide based semiconductors and Van der Waals 2D materials system. Nanophotonic Light Sources (Zinc-Oxide LEDs and lasers, Nanolasers). Nonvolatile memories.
Samet Oymak (California Institute of Technology): Principled algorithms with a solid theoretical foundation with good trade-offs between speed, accuracy, scalability, and data-efficiency.
Shaolei Ren (UC Los Angeles): Security for IT and IT for Security by enhancing the security of computer systems and leveraging computer systems to make cyber-physical systems more secure.
Sheldon Tan (University of Iowa): Modeling and analysis for Accelerated Aging Effects for Copper Interconnect ICs. VSLI reliability, resilience, fault-tolerant computing and dynamic reliability management. Dynamic thermal management for multi-core 3D microprocessors.
Daniel Wong (University of Southern California): Computer architecture, spans data centers, micro architecture, parallel architecture and embedded systems.
Nanpeng Yu (Iowa State University): Smart grid technology. Big data applications in power distribution systems. Restructured electricity market. Renewable energy integration.