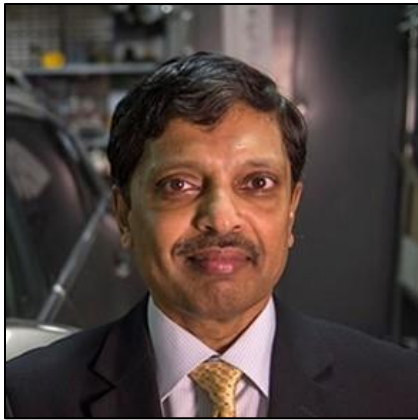# Carnegie Mellon University

Dr. Raj Rajkumar is the Director of the Metro21 Smart Cities Institute, the T-SET National USDOT University Transportation Center for Safety, Mobility21, a USDOT National University Transportation Center for Mobility. Raj is the George Westinghouse professor at CMU's Department of Electrical and Computer Engineering. Raj also serves as Co-Director of the General Motors-Carnegie Mellon Information Technology Collaborative Research Laboratory.

Dr. Rajkumar's work is primarily in cyber-physical systems, such as autonomous driving and vehicular networks, and wireless/sensor networks, including the creation of Nano-RK, the reservation-based real-time operating system (RTOS). Raj has won six best paper awards, and his paper on Priority Inheritance Protocols proposed a solution to 'priority inversion problem,' allowing for the success of the 1997 Mars Pathfinder Mission.

Rajkumar's research interests include but are not limited to operating systems, scheduling theory, resource management, wired/wireless networking protocols, quality of service management, hardware/software architecture, model-based design tools and power management. In the context of wireless/sensor networks, his research interests span hardware, devices, power-efficient networking protocols, run-time environments, large-scale system architectures, visualization and administrative tools.

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