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485 Model Compression and Hardware Acceleration for Neural **Networks: A Comprehensive Survey**

By L. Deng, G. Li, S. Han, L. Shi, and Y. Xie

|CONTRIBUTED PAPER | This article surveys recent advances toward the goal of efficient compression and execution of deep neural networks, without significantly compromising accuracy.

533 A Key 6G Challenge and Opportunity—Connecting the Base of the Pyramid: A Survey on Rural Connectivity

By E. Yaacoub and M.-S. Alouini

|CONTRIBUTED PAPER| This article provides a comprehensive survey of technologies that help address the challenging problem of connectivity in rural

583 A Tutorial on Clique Problems in Communications and Signal **Processing**

By A. Douik, H. Dahrouj, T. Y. Al-Naffouri, and M.-S. Alouini

| CONTRIBUTED PAPER | This tutorial presents a framework for utilizing the clique problem in graph theory, for solving communications and signal processing problems.

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A Density Metric for Semiconductor Technology By H.-S. P. Wong, K. Akarvardar, D. Antoniadis, J. Bokor, C. Hu, T.-J. King-Liu, S. Mitra, J. D. Plummer, and S. Salahuddin

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On the Cover:

Our cover image this month is a nod to artificial neural networks, used for solving artificial intelligence problems.