GAN Dissection and Datacenter RPCs

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**VISUALIZING AND
UNDERSTANDING GANS;
DATACENTER RPCS CAN
BE GENERAL AND FAST.**

For this edition of “The Morning Paper,” I’ve chosen two papers from very different areas.

Image generation using GANs (generative adversarial networks) has made astonishing progress over the past few years. While staring in wonder at some of the incredible images, it’s natural to ask how such feats are possible. “GAN Dissection: Visualizing and Understanding Generative Adversarial Networks” gives us a look under the hood to see what kinds of things are being learned by GAN units, and how manipulating those units can affect the generated images.

February saw the 16th edition of the Usenix Symposium on Networked Systems Design and Implementation. Kalia et al. blew me away with their work on fast RPCs (remote procedure calls) in the datacenter. Through a carefully considered design, they show that RPC performance with commodity CPUs and standard lossy Ethernet can be competitive with specialized systems based on FPGAs (field-programmable gate arrays), programmable switches, and RDMA (remote direct memory access). It’s a fabulous reminder to ensure we’re making the most of what we already have before leaping to more expensive solutions.

For the complete column, go to <https://queue.acm.org/TheMorningPaper>

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