Database management systems (DBMSs) are the most important component of any data-intensive application. They can handle large amounts of data and complex workloads. But they're difficult to manage because they have hundreds of configuration "knobs" that control factors such as the amount of memory to use for caches and how often to write data to storage. Organizations often hire experts to help with tuning activities, but experts are prohibitively expensive for many.

In this talk, I will present OtterTune, a new tool that can automatically find good settings for a DBMSs configuration knobs. OtterTune differs from other DBMS configuration tools because it leverages knowledge gained from tuning previous DBMS deployments to tune new ones. Our evaluation shows that OtterTune recommends configurations that are as good as or better than ones generated by existing tools or a human expert.