

Outstanding Researcher Award Citation for Professor Ooi Beng Chin

Professor Ooi Beng Chin is Distinguished Professor, Dean of the School of Computing, and Director of the Interactive Digital Media Institute.

Beng Chin is among the best regarded researchers in the database arena, for his contributions to distributed data management and to the management of spatio-temporal and multimedia data.

In the recent decade, more than half of all Internet traffic has been peer-to-peer related. In a peer-to-peer network, the "peers" are computer systems connected to each other via the Internet; files can be shared directly between systems on the network without the need of a central server. Beng Chin was one of the first to address issues concerning database support in peer-to-peer computing. He has made significant contributions in data distribution, search, and data management in peer-to-peer networks. He is especially noted for addressing the issue of providing enterprise-quality data sharing and processing in corporate networks. His work in this area will likely have a profound impact on the provision of data sharing without adopting a centralized database system approach.

Beng Chin is also a leading expert on content-based multimedia retrieval and spatio-temporal database management. In multimedia and spatio-temporal database systems, a key challenge is approximate search---for example, given an object's current location, how to efficiently retrieve other objects near it---and innovative indexing technologies are needed to solve this challenge. Beng Chin has invented indexing techniques and query processing approaches that stand out by virtue of their efficiency, robustness, and practical applicability. For example, iDistance, an invention of Beng Chin, is widely regarded as the best high-dimensional indexing technology.

For his many innovations, Beng Chin has already won many prestigious awards internationally (including Fellow of ACM, Fellow of IEEE, IEEE Computer Society Kanai Award, and ACM SIGMOD Contribution Award) and locally (such as the President's Science Award). The conferment of the University Research Award to Beng Chin brings as much credit to the award as it does to him. Congratulations.