

#### Thursday 14:20-16:20 – Graanbeurszaal 0.5

#### SIGMOD Research 16: Machine Learning

Chair: Theodoros Rekatsinas

## Tuple-oriented Compression for Large-scale Mini-batch Stochastic Gradient Descent

Fengan Li (University of Wisconsin, Madison), Lingjiao Chen (University of Wisconsin, Madison), Yijing Zeng (University of Wisconsin, Madison), Arun Kumar (University of California, San Diego), Xi Wu (University of Wisconsin, Madison), Jeffrey Naughton (University of Wisconsin, Madison), Jignesh Patel (University of Wisconsin, Madison)

#### Towards Model-based Pricing for Machine Learning in a Data Marketplace

Lingjiao Chen (University of Wisconsin, Madison), Paraschos Koutris (University of Wisconsin, Madison), Arun Kumar (University of California, San Diego)

### DBEst: Revisiting Approximate Query Processing Engines with Machine Learning Models

Qingzhi Ma (University of Warwick), Peter Triantafillou (University of Warwick)

### Enabling and Optimizing Non-linear Feature Interactions in Factorized Linear Algebra

Side Li (University of California, San Diego), Lingjiao Chen (University of Wisconsin, Madison), Arun Kumar (University of California, San Diego)

# Incremental and Approximate Inference for Faster Occlusion-based Deep CNN Explanations

Supun Nakandala (University of California, San Diego), Arun Kumar (University of California, San Diego), Yannis Papakonstantinou (University of California, San Diego)

#### MNC: Structure-Exploiting Sparsity Estimation for Matrix Expressions

Johanna Sommer (IBM Germany), Matthias Boehm (Graz University of Technology), Alexandre Evfimievski (IBM Almaden Research Center), Berthold Reinwald (IBM Almaden Research Center), Peter Haas (University of Massachusetts Amherst)