

# CIDR 2011 CONFERENCE SCHEDULE

## Sunday January 9<sup>th</sup>, 2011

4pm Registration Opens

6pm Dinner

7pm Informal Evening Get-together

## Monday January 10<sup>th</sup> 2011

7:30am Breakfast

8:30-10:15 Emerging Architectures (Chair: Anastasia Ailamaki)

### **Flash Device Support for Database Management**

Philippe Bonnet (IT University of Copenhagen); Luc Bouganim (INRIA);

### **Hyder – A Transactional Record Manager for Shared Flash**

Philip Bernstein (Microsoft); Colin Reid (Microsoft Corp.); Sudipto Das (UC Santa Barbara);

### **Rethinking Database Algorithms for Phase Change Memory**

Shimin Chen (Intel Labs Pittsburgh); Phillip Gibbons (Intel Labs Pittsburgh); Suman Nath (Microsoft Research);

### **SWissBox: An Architecture for Data Processing Appliances**

Gustavo Alonso (ETH Zurich); Donald Kossmann (ETH Zurich); Timothy Roscoe (ETH Zurich);

10:15-10:45 Coffee Break

10:45-12:30 Interfaces (Chair: Joe Hellerstein)

### **IQ: The Case for Iterative Querying for Knowledge**

Yosi Mass (IBM); Maya Ramanath (MPI); Yehoshua Sagiv (Hebrew U.); Gerhard Weikum (MPI);

### **DBease: Making Databases User-Friendly and Easily Accessible**

Guoliang Li (Tsinghua University); Ju Fan (Tsinghua University); Hao Wu (Tsinghua University); Jiannan Wang (Tsinghua University); Jianhua Feng (Tsinghua University);

### **Here are my Data Files. Here are my Queries. Where are my Results?**

Stratos Idreos (CWI); Ioannis Alagiannis (EPFL); Ryan Johnson (CMU); Anastasia Ailamaki (EPFL);

### **The SQL-based all-declarative FORWARD web application development framework**

Yupeng Fu (UCSD); Kian Win Ong (app2you.com); Yannis Papakonstantinou (UC San Diego); Michalis Petropoulos (UCSD);

## **Monday 1/10 (continued)**

12:30-1:30 Lunch

1:45 – 3:00 Privacy and Personal Data (Chair: Johannes Gehrke)

### **Managing Information Leakage**

Steven Whang (Stanford University); Hector Garcia-Molina (Stanford University);

### **eXO: Decentralized Autonomous Scalable Social Networking**

Andreas Loupasakis (Computer Engineering & Informatics Dept., U. of Patras, Greece); Nikos Ntarmos (C.S. Dept., U. of Ioannina); Peter Triantafillou (University of Patras);

### **Database Access Control and Privacy: Is there a common ground?**

Surajit Chaudhuri (Microsoft Research); Raghav Kaushik (Microsoft Research); Ravi Ramamurthy (Microsoft Research);

3:00-3:30 Coffee Break

3:30-5:15 Consistency (Chair: Gustavo Alonso)

### **Transactional Intent**

Shel Finkelstein (SAP Labs); Thomas Heinzl (SAP Labs); Rainer Brendle (SAP Labs); Ike Nassi (SAP Labs); Heinz Roggenkemper (SAP Labs);

### **Consistency in a Stream Warehouse**

Lukasz Golab (AT&T Labs - Research); Theodore Johnson (ATT);

### **Deuteronomy: Transaction Support for Cloud Data**

David Lomet (Microsoft Research); Justin Levandoski (University of Minnesota); Mohamed Mokbell (University of Minnesota); Kevin Zhao (University of California San Diego);

### **Data Consistency Properties and the Trade-offs in Commercial Cloud Storage: the Consumers' Perspective**

Hiroshi Wada (NICTA); Alan Fekete; Liang Zhao (NICTA); Kevin Lee (NICTA); Anna Liu;

6:00pm-7:00pm Dinner

7:15pm Gong Show (Chair: Yanlei Diao)

## **Tuesday January 11<sup>th</sup> 2011**

7:30am Breakfast

8:30-9:30 **Keynote:** Eric Horvitz, Microsoft Research (Chair: Michael Franklin)

### **Data, Decisions, and Intelligence: Amidst the Foothills of a Revolution**

Systems that learn and reason from streams of data promise to provide extraordinary value to people and society. A confluence of advances has led to an inflection in our ability to collect, store, and harness large amounts of data for generating insights and guiding decision making. Given the long-term possibilities, we have been trekking through the foothills of a larger revolution--and have much to learn. Beyond the core goal of providing valuable services, fielding systems in the open world is critical for testing the sufficiency of existing algorithms and models, and often frames new directions for research. I will discuss efforts on learning and inference in the open world, highlighting key ideas in the context of projects in transportation, energy, and healthcare. Finally, I will discuss opportunities for creating systems with new kinds of competencies by weaving together multiple data sources and models.

Eric Horvitz is a Distinguished Scientist at Microsoft Research. His interests span theoretical and practical challenges with developing systems that perceive, learn, and reason. His contributions include advances in principles and applications of machine learning and inference, search and retrieval, human-computer interaction, bioinformatics, and e-commerce. He has been elected a Fellow of the Association for the Advancement of Artificial Intelligence (AAAI) and of the American Association for the Advancement of Science (AAAS). He currently serves on the NSF Computer & Information Science & Engineering (CISE) Advisory Board and on the council of the Computing Community Consortium (CCC). He received his PhD and MD degrees at Stanford University. More can be found at <http://research.microsoft.com/~horvitz>.

9:30-10:15 **Outrageous Ideas and Vision I: Killer Apps** (Chair: Hank Korth)

### **Using Data for Systemic Financial Risk Management**

Mark Flood (University of Maryland); HV Jagadish (University of Michigan, Ann Arbor); Albert Kyle (University of Maryland); Frank Olken (NSF and LBL); Louiqa Raschid (University of Maryland);

### **Computational Journalism: A Call to Arms to Database Researchers**

Sarah Cohen; Chengkai Li; Jun Yang (Duke); Cong Yu;

10:15-10:45 Coffee Break

## **Tuesday January 11<sup>th</sup> 2011 (continued)**

10:45- 12:30 Potpourri: People, Provenance and Prediction (Chair: Meichun Hsu)

### **Ibis: A Provenance Manager for Multi-Layer Systems**

Christopher Olston (Yahoo! Research); Anish Das Sarma (Yahoo! Research);

### **Answering Queries using Humans, Algorithms and Databases**

Aditya Parameswaran (Stanford University); Neoklis Polyzotis (UC Santa Cruz);

### **The Case for Predictive Database Systems: Opportunities and Challenges**

Mert Akdere (Brown University); Ugur Cetintemel (Brown University); Matteo Riondato (Brown University); Eli Upfal (Brown University); Stan Zdonik (Brown University);

### **User Feedback as a First Class Citizen in Information Integration Systems**

Khalid Belhajjame (University of Manchester); Norman Paton (University of Manchester); Alvaro A. A. Fernandes (University of Manchester); Cornelia Hedeler (University of Manchester); Suzanne Embury (University of Manchester);

12:30-1:30 Lunch

1:30-4:00 Free Time

4:00-5:45 Outrageous Ideas and Vision II: Rethinking Data Management  
(Chair: Ugur Cetintemel)

### **Data Externality**

Rakesh Agrawal (Microsoft);

### **No bits left behind**

Eugene Wu (MIT); Carlo Curino (MIT); Sam Madden (MIT);

### **DBrev: Dreaming of a Database Revolution**

Gjergji Kasneci (Microsoft research Cambridge); Jurgen Gael (Microsoft Research Cambridge); Thore Graepel (Microsoft Research Cambridge);

### **Towards a One Size Fits All Database Architecture**

Jens Dittrich (Saarland University); Alekh Jindal (Saarland University);

### **Longitudinal Analytics on Web Archive Data: It's About Time!**

The LAWA Team;

6:00pm-7:00pm Dinner

## **Tuesday January 11<sup>th</sup> 2011 (continued)**

7:15pm-9:00pm Outrageous Ideas and Vision III: Dealing with People  
(Chair: Donald Kossmann)

### **Data in the First Mile**

Kuang Chen (UC Berkeley); Joe Hellerstein (UC Berkeley); Tapan Parikh (UC Berkeley);

### **Managing Structured Collections of Community Data**

Wolfgang Gatterbauer (University of Washington); Dan Suciu (University of Washington);

### **Crowdsourced Databases: Query Processing with People**

Adam Marcus (MIT CSAIL); Eugene Wu (MIT); Sam Madden (MIT); Robert Miller;

### **Enabling Privacy in Provenance-Aware Workflow Systems**

Susan Davidson (University of Pennsylvania); Sanjeev Khanna (University of Pennsylvania); Val Tannen (University of Pennsylvania); Sudeepa Roy (University of Pennsylvania); Yi Chen (Arizona State University); Tova Milo (Tel Aviv University); Julia Stoyanovich (University of Pennsylvania);

### **The Schema-Independent Database UI---A Proposed Holy Grail and Some Suggestions**

Eirik Bakke (MIT); Edward Benson;

9:00pm-9:15pm Best Paper and Gong Show Awards Ceremony (Chair: Yanlei Diao)

9:15pm - Lubricated Discussions

## **Wednesday January 11<sup>th</sup> 2011**

7:30am Breakfast

8:30-10:10 Cloud Services (Chair: Daniel Abadi)

### **Megastore: Providing Scalable, Highly Available Storage for Interactive Services**

Jason Baker (Google Inc.); Chris Bond (Google Inc.); James Corbett (Google Inc.); JJ Furman (Google Inc.); Andrey Khorlin (Google Inc.); James Larson (Google Inc.); Jean-Michel Leon (Google Inc.); Yawei Li (Google Inc.); Alexander Lloyd (Google Inc.); Vadim Yushprakh (Google Inc.);

### **Relational Cloud: a Database Service for the cloud**

Carlo Curino (MIT); Evan Jones (MIT); Raluca Popa (MIT); Nirmesh Malviya (MIT); Eugene Wu (MIT); Sam Madden (MIT); Har Balakrishnan (MIT); Nikolai Zeldovich (MIT);

### **Cloud Resource Orchestration: A Data-Centric Approach**

Yun Mao (AT&T Labs - Research); Changbin Liu (UPenn); Jacobus Van der Merwe (AT&T Labs - Research); Mary Fernandez (AT&T Labs - Research);

### **Consistency Analysis in Bloom: a CALM and Collected Approach**

Peter Alvaro (UC Berkeley); Neil Conway (UC Berkeley); Joe Hellerstein (UC Berkeley); William Marczak (UC Berkeley);

10:10-10:30 Coffee Break

10:30-12:10 Analytics (Chair: Sam Madden)

### **Starfish: A Self-tuning System for Big Data Analytics**

Herodotos Herodotou (Duke University); Harold Lim (Duke University); Gang Luo (Duke University); Nedyalko Borisov (Duke University); Liang Dong (Duke University); Fatma Bilgen Cetin (Duke University); Shivnath Babu (Duke University);

### **Provenance for Generalized Map and Reduce Workflows**

Robert Ikeda (Stanford University); Hyunjung Park (Stanford University); Jennifer Widom (Stanford University);

### **DBToaster: Agile Views for a Dynamic Data Management System**

Oliver Kennedy (EPFL); Yanif Ahmad (Johns Hopkins University); Christoph Koch (EPFL);

### **SciBORQ: Scientific data management with Bounds On Runtime and Quality**

Lefteris Sidorouros (CWI); Martin Kersten (CWI); Peter Boncz (CWI);

12:10- 12:30 Outrageous Ideas and Vision Awards and Closing Remarks

12:30 Lunch

Conference Ends