

# Andrew Hanushevsky

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## Information systems specialist

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## Education and training

- M.S. in Computer Science, Cornell University, Ithaca NY

## Professional experience

- *Information Systems Specialist, SLAC National Accelerator Laboratory, 1996 – present*  
Main focus: extremely large-scale high-performance data access for scientific experiments. Responsible for the design and development of the Scalla/xrootd distributed data access system. Design and develop high-performance interfaces to the HPSS Mass Storage System. Design and develop high-speed network based data movement tools (e.g. bbcp)
- *Senior Systems Analyst, Cornell University, 1978-1996*  
Designed and led the development effort for the initial HPSS Name Service which received a US patent. Designed and developed SideCar, a distributed authentication mechanism. Was the technical coordinator for Cornell's Project Mandarin, a client/server widely adopted self-service student information system. Devised algorithms using multi-threading and vectorization to parallelize complex queries and data base transactions.

## Publications

- F Furano and A Hanushevsky: Data access performance through parallelization and vectored access. Some results. 2008 J. Phys.: Conf. Ser. 119 072016
- Chuck Boehm, Stephen J. Gowdy, Andrew Hanushevsky, David Leith, Randy Melen, Richard Mount, Teela Pulliam, Bill Weeks: PetaCache: A memory-Based Data-Server System. HPDC 2006: 349-350
- Jacek Becla, Andrew Hanushevsky, Sergei Nikolaev, Ghaleb Abdulla, Alexander S. Szalay, María A. Nieto-Santisteban, Ani Thakar, Jim Gray: Designing a Multi-petabyte Database for LSST CoRR [abs/cs/0604112](https://arxiv.org/abs/cs/0604112): (2006)
- Fabrizio Furano, Andrew Hanushevsky: Managing commitments in a Multi Agent System using Passive Bids. IAT 2005: 698-701
- Alvise Dorigo, Peter Elmer, Fabrizio Furano, Andrew Hanushevsky: XROOTD/TXNetFile: a highly scalable architecture for data access in the ROOT environment, Proceedings of the 4th WSEAS International Conference on Telecommunications and Informatics, 2005, ISBN:960-8457-11-4.
- Andrew Hanushevsky, Bill Weeks: Designing high performance data access systems - invited talk abstract. WOSP 2005: 267
- Andrew Hanushevsky, Heinz Stockinger: A Proxy Service for the xrootd Data Server. SAG 2004: 38-49
- Adeyemi Adesanya, Tofigh Azemoun, Jacek Becla, Andrew Hanushevsky, Adil Hasan, Wilko Kroeger, Artem Trunov, Daniel L. Wang, Igor Gaponenko, \* Simon Patton, David R. Quarrie: On the Verge of One Petabyte - the Story Behind the BaBar Database System CoRR [cs.DB/0306020](https://arxiv.org/abs/cs.DB/0306020): CHEP Conference, La Jolla, CA, USA, March 2003
- Jacek Becla, Andrew Hanushevsky: Creating Large Scale Database Servers. HPDC 2000: 271-278
- Andrew Hanushevsky, Marcia Nowark: Pursuit of a Scalable High Performance Multi-Petabyte Database. IEEE Symposium on Mass Storage Systems 1999: 169-175

## Synergistic activities

- Leading the Scalla/xrootd collaboration composed of a distributed team of developers located in the Germany, Switzerland, and the US.
- Participate in the OSG/ATLAS Tier 2/3 distributed data management working group.

## Collaborators and their affiliations

Jacek Becla (SLAC National Accelerator Laboratory), Douglas Benjamin (Duke University), Dirk Duellmann (CERN, Geneva, CH), Peter Elmer (Princeton University), Fabrizio Furano (CERN, Geneva, CH), Gerri Ganis (CERN, Geneva, CH), Rob Gardner (University of Chicago), Lukasz Janyst (CERN, Geneva, CH), Wilko Kroeger (SLAC National Accelerator Laboratory), Jerome Lauret (Brookhaven National Laboratory), Fons Rademakers (CERN, Geneva, CH), Heinz Stockinger (Swiss Institute of Bioinformatics, Luusanne, CH), Jeff Kantor (LSST), Kian-Tat Lim (SLAC National Accelerator Laboratory), Sergey Panitkin (Brookhaven National Laboratory), Richard Mount (SLAC National Accelerator Laboratory), Marcin Nowak (CERN, Geneva, CH), Andreas Peters (CERN, Geneva, CH), Arie Shoshani (Lawrence Berkeley Laboratory), Artem Trunov (FZK, Karlsruhe, DE), Daniel Wang (SLAC National Accelerator Laboratory), Wei Yang (SLAC National Accelerator Laboratory)