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**Objectives:**

- To develop new mechanisms for representing and accessing information, particularly incomplete or uncertain information.
- To further my understanding of networked and distributed systems and their underlying concepts.
- To explore and address problems that bridge a variety of computer science subfields.

**Education:**

- 2008 Masters, Computer Science, Cornell University, Ithaca, N.Y.  
2011 PhD
- 2005 B.S. Computer Science with Honors, New York University, New York, N.Y. (GPA: 3.598)
- 2005 B.E. Computer Engineering, Stevens Institute of Technology, Hoboken, N.J. (GPA: 3.514)
- 2000 Math & Science, Stuyvesant High School, New York, N.Y.

**Professional Experience:**

- 2010–present Postdoctoral Fellow, D.A.T.A. Lab, EPFL, Lausanne, Switzerland  
I continued work on the DBToaster database compiler, initially as a PhD student and as a Postdoctoral fellow after graduating in 2011.
- Summer 2010 Summer Intern, Microsoft Research, Redmond W.A.  
I worked with the Microsoft Azure capacity planning team to develop simulation tools.
- Summer 2009 Summer Intern, Yahoo! Labs, Sunnyvale, C.A.  
I helped develop models for, and techniques to improve simulation and forecasting accuracy.
- 2008–2010 Research Assistant, Database Group, Cornell University, Ithaca, N.Y.  
I worked on the MayBMS probabilistic database and DBToaster database compiler.
- 2006–2008 Research Assistant, Nexus Working Group, Cornell University, Ithaca, N.Y.  
I investigated network management applications of Trusted Platform Modules.
- 2003–2005 Programmer, Humanities Computing Group, New York University, New York, N.Y.  
I developed website backends and visualization software for a variety of humanities projects.
- 2001–2003 Programmer, Parallel and Distributed Systems Group, New York University, New York, N.Y.  
I developed secure networking and authentication/authorization technologies.

**Teaching Experience:**

- Practicum Instructor, Cornell, Operating Systems: Spring 2006, Fall 2006, Fall 2008
- Teaching Assistant, EPFL, Advanced Databases: Spring 2011

## Publications:

- “Inventory Allocation for Online Graphical Display Advertising Using Multi-Objective Optimization” (paper; Yang, Vee, Vassilvitskii, Tomlin, Shanmugasundaram, Anastasakos, Kennedy) - *ICORES* 2012
- “Jigsaw: Efficient optimization over uncertain enterprise data” (paper; Kennedy, Nath) - *SIGMOD* 2011
- “Fuzzy Prophet: Parameter exploration in uncertain enterprise scenarios” (demo; Kennedy, Lee, Lobo, Smyl, Nath) - *SIGMOD Demo* 2011
- “DBToaster: Agile Views for a Dynamic Data Management System” (paper; Kennedy, Ahmad, Koch) - *CIDR* 2011
- “Inventory Allocation for Online Graphical Display Advertising” (tech report; Yang, Vee, Vassilvitskii, Tomlin, Shanmugasundaram, Kennedy) - *CoRR* 2010
- “System for display advertising optimization using click or conversion performance” (pending patent; Kennedy, Anastasakos, Mao, Vee, Shanmugasundaram, Vassilvitskii, Yang, Tomlin) - 2010
- “PIP: A Database System for Great and Small Expectations” (paper; Kennedy, Koch) - *ICDE* 2010
- “Dynamic approaches to in-network aggregation” (paper; Kennedy, Koch, Demers) - *ICDE* 2009, *CoRR* 2008
- “Nexus: A New Operating System for Building Trustworthy Applications” (poster; Shieh, Williams, Walsh, Kennedy, Reynolds, Sirer, Schneider) - *NSDI* 2007
- “XMon-BGP: Securing BGP Using External Security Monitors” (poster; Reynolds, Kennedy, Sirer, Schneider) - *NSDI* 2007
- “The Face of Meaning” (paper; Shawver, Kennedy) - *ACH/ALLH* 2005; *CaSTA* 2004
- “Second language comprehension in an online multimedia environment: Integrating theory and practice.” (paper; Lage-Otero, Kennedy) - *E-Learn* 2004

## Selected Projects:

- “DBToaster” (OCAML/Ruby/Java/C++; UNIX) A compiler that produces database engines highly optimized for a small set of SQL queries and that efficiently support distributed processing/storage. *Cornell University - Database Group* and *EPFL - DATA Lab*
- “Jigsaw” (C#/T-SQL/Ruby; UNIX, Windows) Tools for indexing and analyzing the output of parametrized stochastic black boxes. *Microsoft Research/Microsoft Server & Tools*
- “MayBMS” and “PIP” (C/Postgres; UNIX) A probabilistic database built on top of Postgres. *Cornell University - Database Group*
- “The Face of Meaning” (Java/Ruby; Web) - A collocation visualizer, part of TaPoR tools. *NYU Humanities Computing Group*
- “CyberBuch” (PHP/mysql; Web) - A web-based implementation of the CyberBuch language learning and research tool, originally developed in HyperCard by Jan Plass. *NYU Humanities Computing Group*
- “Hugin” (ObjJ/PHP/mysql; Web) - A shared battlemap for use with online “tabletop” RPGs. *Personal Project*
- “HotCocoa” (ObjC; OSX, iPhone) - An implementation of the Hotline Connect chat protocol. *Personal Project*