

# Donald Patrick Carney

Department of Computer Science  
Brown University  
Box 1910, Providence, RI 02912  
[dpc@cs.brown.edu](mailto:dpc@cs.brown.edu)  
(401) 351-7090

## Education

1997-present	<b>Brown University</b> Ph.D., Computer Science, expected May, 2004	<b>Providence, RI</b>
2001	<b>Brown University</b> Sc.M., Computer Science	<b>Providence, RI</b>
1996	<b>Polytechnic University</b> M.S., Computer Science	<b>Brooklyn, NY</b>
1990	<b>Rensselaer Polytechnic Institute</b> B.S., Interdisciplinary Science Concentration: Computer Science; Minor: Management	<b>Troy, NY</b>

## Experience

1997-present	<b>Brown University</b> Research/Teaching Assistant <ul style="list-style-type: none"><li>TA for CS032 (Introduction to Software Engineering), CS127 (Database Management Systems), CS190 (Software System Design)</li></ul>	<b>Providence, RI</b>
2003	<b>Mitre Corporation</b> Consultant <ul style="list-style-type: none"><li>Instruction in use and operation of a data stream management system</li><li>Assistance in development of research proposal</li></ul>	<b>Bedford, MA</b>
1990-1997	<b>Porta Systems Corporation</b> Senior Programmer/Analyst <ul style="list-style-type: none"><li>Perform and manage international projects, bringing a telecommunications system through its entire life-cycle (system consisting of 1,000,000+ lines of C and SQL and deployed in 20 countries servicing over 25,000,000 telephone lines)</li><li>Work with sales force and potential clients, perform pre-sales consulting, including demonstrations, requirements and design specifications analysis, and cost analysis</li><li>Responsible for software coding, installation and testing, including such project management tasks as scheduling, goal setting and allocating work to client personnel</li><li>Provide training and technical support to clients</li><li>On-site development, installation, training and support requiring prolonged stays in Chile, Czech Republic, Germany, Mexico, Indonesia and Hong Kong</li></ul>	<b>Syosset, NY</b>

## Publications

**Retrospection on Aurora** H. Balakrishnan, M. Balazinska, D. Carney, U. Cetintemel, M. Cherniack, C. Convey, E. Galvez, J. Salz, M. Stonebraker, N. Tatbul, R. Tibbetts and S. Zdonik. Submitted to VLDB Journal Special Issue on Data Stream Processing .

**Operator Scheduling in a Data Stream Environment**, D. Carney, U. Cetintemel, A. Rasin, S. Zdonik, M. Cherniack and M. Stonebraker, Proceedings of the 29th International Conference on Very Large Data Bases (VLDB), Sept., 2003. To Appear.

**Aurora: A New Model and Architecture for Data Stream Management**, D. Abadi, D. Carney, U. Cetintemel, M. Cherniack, C. Convey, S. Lee, M. Stonebraker, N. Tatbul, and S. Zdonik, VLDB Journal, August, 2003. To Appear.

**Reducing Execution Overhead in a Data Stream Manager**, D. Carney, U. Cetintemel, A. Rasin, S. Zdonik, M. Cherniack and M. Stonebraker, Proceedings of the ACM Workshop on Management and Processing of Data Streams, June, 2003. To Appear.

**Aurora: A Data Stream Management System (Demonstration)** D. Abadi, D. Carney, U. Cetintemel, M. Cherniack, C. Convey, C. Erwin, E. Galvez, M. Hatoun, J. Hwang, A. Maskey, A. Rasin, A. Singer, M. Stonebraker, N. Tatbul, Y. Xing, R. Yan and S. Zdonik, Proceedings of the ACM SIGMOD International Conference on Management of Data, San Diego, CA, June, 2003. To appear.

**Scalable Application Aware-Data Freshening**, D. Carney, S. Lee, S. Zdonik. IEEE International Conference on Data Engineering (ICDE), March 2003

**Index Hint for On-Demand Broadcasting** (poster) S. Lee, D. Carney, S. Zdonik. IEEE International Conference on Data Engineering (ICDE), March 2003

**Scalable Distributed Stream Processing**, M. Cherniack, H. Balakrishnan, M. Balazinska, D. Carney, U. Cetintemel, Y. Xing, S. Zdonik. First Semiannual Conference on Innovative Data Systems Research (CIDR), Asilomar, CA. Jan. 2003

**Monitoring Streams: A New Class of Data Management Applications** D. Carney, U. Cetintemel, M. Cherniack, C. Convey, S. Lee, G. Seidman, M. Stonebraker, N. Tatbul, and S. Zdonik. In proceedings of the 28th International Conference on Very Large Data Bases (VLDB'02), August 20-23, Hong Kong, China.

## Patents

**Tennis Racket String Tension Tester**, US Patent No. 4,794,805, Jan. 1989. With W. Carney

**Racket String Tension Tester**, US Patent No. 4,876,900, Oct. 1989. With W. Carney