# CS848 Paper Submission Site

Go To CS848 Site

Submit or Update A Review For Paper #6

Go To CS848 Submissions

It is currently Wednesday 27th of October 2004 05:01:45 PM EDT

**Your review has been finalized!**

| **Paper # 6 (Download paper of type application/pdf, 705224 bytes)** | |
|---|---|
| Title: | Fjording the Stream: An Architecture for Queries Over Streaming Sensor Data |
| Abstract: | Samuel Madden<br>Michael J. Franklin |

---

**You have already finalized your review for this paper.**
**You can no longer modify it, but you may view it.**

**If you made a mistake in your review and you want it "unfinalized",**
**you may send mail to the program chair asking them to unfinalize it**

Send yourself this review by email

| Attribute | Value |
|---|---|
| Are you finished with this review? | Finalize, I am done editing |
| Provide a short summary of the paper | This paper presents Fjords, a method to combine sensor data and traditional DBMS data into one query request and reply. The authors begin with a brief introduction to the field of sensors and describe the working environment for road and traffic sensors. Three requirements for sensor operation and use are presented.<br><br>The authors then present the notion of a Fjord. A Fjord consists of two components: operators and queues. An operator is responsible for performing one of the operations (i.e. select, project, etc.) on a tuple from one of possibly many input queues, and putting the tuple into one or more output queues. Applications can then register and make use of the tuples coming from a queue. The authors mention some weak points of their system, such as the inability to process blocking join operations.<br><br>The authors then go on to discuss the sensor proxy component. The sensor proxy acts as a mediary between the Fjord and the sensor, grabbing data and providing instruction to the sensor. For example, the proxy can shut the sensor down if no queries are being run. Also, the proxy can relay data directly an input queue that multiple Fjords can make use of in order to aggregate input data for concurrent queries over the same data. The authors present an example of how Fjords can be created, and how they can be used over multiple queries.<br><br>Next, the authors present some performance analyses on real queries. The optimizations the authors present to deal with multiple queries in one Fjord appear to reduce response time to all queries considerably. The authors conclude with a discussion of related work as well as a short conclusion. |
| | Fjords is a novel way of aggregating information from multiple heterogeneous data |

| | |
|---|---|
| paper? (1-3 sentences) | sources into one place. Also, Fjords provide a performance boost in situations where many users are running the same query. |
| What is the weakness of the paper? (1-3 sentences) | This scheme cannot run blocking operations such as sort or aggergation on the full data set. Thus, a subset of the relation must be used. |
| Your qualifications to review this paper | I know the material, but am not an expert |
| Writing Quality | Good |
| Relevance to query processing? | The paper is relevant to query processing |
| **Experimental Methodology** | **Good** |
| Novelty of paper | This is a new contribution to an established area |
| **Overall paper merit** | **A novel or new contribution to this area with good methodology, or an incremental contribution paper that has excellent methodology. A must read for anyone in the area.** |
| In your opinion, will this paper be important over time? | Good |
| Provide additional detailed comments to the author | You have presented quite a novel concept here. I find your work quite interesting. I only have one major concern:<br><br>-I think that your discussions were too brief on some topics. Some additional details would have been appreciated. Also, some of your presented discussions were tough to follow and understand. Care should be taken next time to ensure that you do not miss important details, and that readers of all levels can understand your work. |
| **Additional comments to PC (not seen by author)** | **I believe that this work is quite interesting. I have no additional specific comments.** |

Goto Main Index  Close Window