**How to Use Advanced Search in IEEE Xplore**

To use advanced search, select the advanced search hyperlink on the home Webpage. I prefer to use the advanced search because it provides more control over the search which could result in a more precise results set.

When using advanced search, you have a choice to search metadata only or full text and metadata. The metadata only radio button is selected by default.

Depending on your search, a full text search can yield many results where several are irrelevant, so I generally begin with metadata only. There are cases where full text searches are more effective, but this isn’t the case for our example. We are seeking information that pertains to medium access control and sensor networks.

In the search term textbox in the first row, type the term **mac** [M A C]. It’s a popular acronym for medium access control.

On the second line, select the term **OR** from the conditional combo box. In the search term textbox on the second line, type **medi* “access control”**. The asterisk finds terms that start with medi [or M E D I] like media and medium. Since access control is in quotation marks, the exact phrase access control must appear for a publication to be part of the results set. This could be read as medi* AND “access control”.

In the search term textbox in the third row, type the term **sensor**. The search will use stemming to find terms like sensor and sensors because we didn’t use a * or asterisk and we didn’t use quotation marks.

I could add more lines by selecting the add new line button, but it isn’t needed for this search. [Select the search button.]

On the results screen, the search string appears as **(((mac) OR medi* “access control”) AND sensor)**.

Since the terms from the first two rows of textboxes have parenthesis around them, they are grouped together to require mac OR medi* AND “access control,” as well as sensor OR sensors to be present for a document to be part of the result set.

If there weren’t parenthesis around the first few terms, the search would require mac OR it would require medi* AND “access control” AND (sensor OR sensors). The second search would result in many irrelevant results.

This concludes this presentation. Please select the next presentation in the series, “How to Combine a Subject and Keyword Search in IEEE Xplore.” Thank you.