Contribution ID: **105** Type: **5-minute lightning talk**

Fermilab Web-based Controls Application Framework R&D

Wednesday, 26 April 2023 16:12 (5 minutes)

The Accelerator Controls Operation Research Network (ACORN) project is a DOE O 413.3B project with a projected cost over $135M that aims to modernize Fermilab's accelerator control system by 2028. A part of this modernization effort is to replace the existing user applications that are used by operators and experts to control and tune the accelerator complex. These applications use a diverse menagerie of outdated technologies including low-level UI frameworks such as Xlib and Java Swing. A goal of ACORN is to leverage modern web-based application frameworks for control system applications. Three candidate web UI frameworks were selected as part of the ACORN R&D – React, Fresh and Flutter. To evaluate the developer experience with these frameworks, 5 developers were given a simple task: use a framework to implement the user interface for a simple control room application: the telephone index. We present our findings and the reasoning behind our selected framework.

Please select if talk will be in person or on zoom

In person

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