While much of the archaeological record keeping process has gone at least partially digital, “legacy” materials remain stubbornly analog. This situation means that a great deal of incredibly important archaeological information is closed off to scholars, Indigenous communities, and descent groups. Efforts to digitize the vast mountains of legacy archaeological records have been historically and understandably piecemeal and inconsistent. Digitization, however, is only half of this equation. One might argue that access is a far more pressing a challenge. What good are digitized materials if they are not accessible to those who need them? Archaeological projects, scholars, and collections holding institutions have used a broad array of strategies to provide access to what materials they’ve been able to digitize. Unfortunately, most of these strategies share critical weaknesses that impede the usability and usefulness of the digitized records.

The Archaeological Resource Cataloging System (ARCS) ([arcs.matrix.msu.edu](http://arcs.matrix.msu.edu)) was made to address many of these issues. Created at Michigan State University and funded by the National Endowment for the Humanities, ARCS is a free, open-source software solution that allows archaeological projects and collections holding institutions to more easily manage, publish, and share legacy, paper-based records and data.

This talk will explore what motivated the creation of ARCS, as well as the decisions that were made during the project’s development. Particular attention will be paid to honestly reflecting on both the successes and the failures of the project. Most importantly, however, this talk will use ARCS as a way to reflect on the broader challenge of building modern, open source digital tools for archaeology and heritage.