



Transforming Visual Reconnaissance Data into Knowledge, with ARIO: The Automated Reconnaissance Image Organizer

A “Netflix for Disaster Images”



Engineers: How much time do you spend sorting, annotating, and organizing photos and data files? A new tool called ARIO can dramatically speed the effort.

Engineers record real world structural performance by taking large volumes of photos. Reconnaissance documentation, for example, produces large sets of photos of buildings and building components. Accurate and rich descriptions of such images are important for interpreting the data, but must be added before details are forgotten.

ARIO takes a *Netflix-like, media-oriented* approach to tackling this challenge of bringing scientific data to the researcher. Powered by artificial intelligence, a team at Purdue University has developed a tool to automate the organization and documentation of this scientific information. AI algorithms determine key visual contents in the images, so the data can be rapidly organized into a report according to a schema designed specifically to support field teams examining buildings.

We invite you to join in this international workshop, ***Transforming Visual Reconnaissance Data into Knowledge with ARIO***.

GENERAL INFORMATION (choose one time for participation):

Session I: Friday April 23, 2021 Time: 2 pm - 4 pm (USA Eastern time)

Session II: Monday April 26, 2021 Time: 9 am - 10 am (USA Eastern time) + Plus a pre-recorded overview of about 45 minutes.

Location: Online (Registration link below)

Speakers: Xiaoyu Liu, Lissette Iturburu, and Purdue University Professor Shirley J. Dyke

Cost: Free

In each session, attendees will be introduced to the fundamental capabilities of ARIO for organizing, filtering, and discovering useful data. The workshop begins with a presentation of the motivation and capabilities of the ARIO tool, followed by an interactive hands-on session. A series of tasks will be given to the users so they can get accustomed to the tool and perform their own research. While several sample datasets are provided, users can also choose to test the tool using their own building images.

Come, join, and feel the power of the ARIO tools.

HOW TO REGISTER

To register for this international, web-based (Webex) workshop, please use the form at this link:

<https://forms.gle/GCxhTwSmZJ6YmncZA>

Questions? Please contact: Jean Kwannandar <jkwannan@purdue.edu>



Supported in part by the National Science Foundation

