

# **Innovative Research Orientation** Presented by UC Riverside and Google Cloud

## March 13, 2023 from 9 AM - 3 PM in HUB 355

Google Cloud and UCR Information Technology Solutions are conducting a 1-day orientation to introduce researchers to Google Cloud, showcase key solutions that can accelerate scientific discovery and demonstrate how to quickly and easily get started. Those interested must register to attend.

#### Welcome: Google Cloud + Research

- 9:00 AM
- Welcome and Introduction
- Speaker: Keith Binder
- Google and Research • Intro of Practice Lead Team
- and domain expertise

## Module 3: Curating Data and Managing Costs

12:15 PM

• Manage and share access to data with Cloud IAM

Speaker: Charles Elliott • Discover data with Data

Catalog / Analytics Hub

Module 1: Introduction to Google Cloud

9:30 AM

Speaker:

Derek Oliver

- Google Cloud infrastructure
- Introduction to data and ML on Google Cloud
- The data journey on Google Cloud
- Cloud economics
- Use case: RAD Lab Data Science module

### Module 4: Analyzing Data with Notebooks

• Google Colab

Speaker: Volker Eyrich

1:00 PM

- Vertex AI Workbench
- Created managed notebooks instance
- Connecting to BigQuery using Python and R in Notebooks
- Use Case: UNC Wirka

## Module 2: Ingesting Data into Google Cloud

10:15 AM	• Data storage solutions
	overview
Speaker:	• Load image data into Cloud
Charles Elliott	Storage
	Load structured data into
	BigQuery
	<ul> <li>Using BigQuery for analysis</li> </ul>
	• Use Case: Cross Modality
	Analysis

## Module 5: Machine Learning in Google Cloud

1:45 PM

• Machine Learning options on Google Cloud

Speaker:

- Volker Eyrich
- BigQuery ML

 Vertex AI AutoML LLM

Open Discussion & Networking - 2:30 PM

Lunch - 11:00 AM