

Innovative Research Orientation

Presented by UC Riverside and Google Cloud

March 13, 2023 from 9 AM - 3 PM in HUB 302 South

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.

Check In & Continental Breakfast - 8:30 AM

Welcome: Google Cloud + Research

- 9:00 AM**
- Welcome and Introduction
 - Google and Research
 - Intro of Practice Lead Team and domain expertise
- Speakers:
Matt Gunkel
Keith Binder

Module 3: Curating Data and Managing Costs

- 12:15 PM**
- Manage and share access to data with Cloud IAM
 - Discover data with Data Catalog / Analytics Hub
- Speaker:
Charles Elliott

Module 1: Introduction to Google Cloud

- 9:30 AM**
- 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
- Speaker:
Derek Oliver

Module 4: Machine Learning in Google Cloud

- 1:00 PM**
- Machine Learning options on Google Cloud
 - BigQuery ML
 - Vertex AI AutoML
 - Responsible AI
 - From NLP to LLM
- Speaker:
Volker Eyrich

Module 2: Ingesting Data into Google Cloud

- 10:15 AM**
- Data storage solutions overview
 - Load image data into Cloud Storage
 - Load structured data into BigQuery
 - Using BigQuery for analysis
 - Use Case: Cross Modality Analysis
- Speaker:
Charles Elliott

Module 5: Analyzing Data with Notebooks

- 1:45 PM**
- Google Colab
 - Vertex AI Workbench
 - Created managed notebooks instance
 - Connecting to BigQuery using Python and R in Notebooks
 - Use Cases
- Speaker:
Volker Eyrich

Lunch - 11:00 AM

Open Discussion & 'Deep Dives' - 2:30 PM