

Data to Decisions in the E&P

Bridging the Gap with ML

KFUPM - Dhahran, KSA

FEB. 8-11, 2025

Under the patronage of:

Dr. Muhammad Al-Saggaf
President of KFUPM



DATA TO DECISIONS IN THE E&P

BRIDGING THE GAP WITH ML

KFUPM - DHAHRAN, KSA

FEB. 8-11, 2025



MESSAGE FROM THE DEANS

On behalf of the College of Petroleum Engineering & Geosciences and the College of Computing and Mathematics at King Fahd University of Petroleum & Minerals, it is our pleasure to welcome you to the “Data to Decisions in the E&P – Bridging the Gap with ML” workshop. This event brings together a diverse community of industry professionals, leading researchers, and innovative academicians to explore the power of data-driven methodologies and machine learning techniques in shaping the future of exploration and production.

At KFUPM, we are committed to advancing knowledge and nurturing talent at the intersection of geosciences, petroleum engineering, mining and computing disciplines. Our strategic location uniquely positions us to foster dynamic industry-academia collaborations. Through this workshop, we aim to catalyze new approaches and methodologies that leverage cutting-edge AI/ML frameworks for tackling the most pressing challenges facing the upstream and mining sectors.

We are confident that the knowledge shared, discussions sparked, and partnerships forged during this gathering will not only accelerate scientific and technological progress, but also contribute to a more sustainable and innovative energy future. Thank you for joining us, and we look forward to witnessing the transformative ideas and impactful solutions that emerge from this event.



Dr. Ali Alyousef
Dean of College of Petroleum
Engineering & Geosciences



Dr. Abdullah Sultan
Dean of College of Computing
and Mathematics

DATA TO DECISIONS IN THE E&P

BRIDGING THE GAP WITH ML

KFUPM - DHAHRAN, KSA

FEB. 8-11, 2025



ABSTRACT

AI/ML has begun to have an impact broadly in Earth and Planetary Sciences, shedding entirely new light on extracting information from a wide range of data. Concurrently, scientific ML is empowering a deeper grasp of complex physics and processes, marking significant progress in the past couple of years. In the rapidly evolving landscape of AI/ML, this (3+1)-day Technical Workshop at the KFUPM main campus in Dhahran, Saudi Arabia, aims to connect academia and industry as well as the AI/ML and E&P communities. The event targets fostering collaborations that drive technological advancements and push the boundaries of what is achievable in petroleum and mining science and engineering while the industry transitions itself towards a more sustainable future. Participants will have the chance to present scientific breakthroughs, engage in in-depth discussions, network with experts, chart venues for new scientific partnerships, and explore potential areas for future research and development in a challenging and exciting field.

The program will focus on innovative applications and developments of AI/ML techniques leading to a new generation of approaches to overcome challenges faced by the upstream and mining sectors at large, including reservoir characterization, rock physics and modeling, drilling and tunneling optimization, productivity enhancement and production forecasting, carbon sequestration and utilization, hydrogen economy, lithium mining, and more. The event will encompass a wide range of topics, from data-driven approaches to predictive analytics, from (geo)physics-based deep learning to inference and uncertainty quantification such as through score diffusion, LLMs, and from learning dynamics to reinforcement learning whether for excavation stability or well control.

The invitation-only event will feature keynote lectures, technical presentations, and a panel session. A short course will precede the main event and will be open to the public. Final presentations on selected challenge problems in a competition for graduate students and post-docs will also help set the stage for the main event. At the main event, participants will also work in breakout sessions to identify major operational and technical challenges and explore new directions to address some of the key challenges brought forward from the panel session, and potentially uncover hidden opportunities to collaborate and deliver AI/ML solutions that take the industry into the next energy evolution.

DATA TO DECISIONS IN THE E&P

BRIDGING THE GAP WITH ML

KFUPM - DHAHRAN, KSA

FEB. 8-11, 2025



ORGANIZING COMMITTEE

Mazen Kanj, CPG Consultant, KFUPM

Maarten de Hoop, Chair of Computational and Applied Mathematics and Earth Science, Rice University

Nasher AlBinHassan, Head of Digital Advanced Research Center Unit, EXPEC ARC, Aramco

Motaz Al-Farraj, Chairman, Dept. of Information & Computer Science, KFUPM

Michael Mahoney, Professor of Statistics, UC Berkeley

Umair Bin Waheed, Associate Professor of Geosciences, KFUPM

Mohammed Al-Hamad, R&D Team Leader, SLB

Mustafa Kumral, Professor of Mining and Materials Engineering, McGill University

Maad Al-Owaifeer, Director, SDAIA-KFUPM Joint Research Center for AI, KFUPM

Salem Al-Gharbi, Manager Data Science and AI, Ma'aden

Hamed Saidaoui, Principal Scientist (Physics), Halliburton

EVENT CONTRIBUTORS

Ali Alyousef, Dean, College of Petroleum Engineering & Geosciences (CPG), KFUPM

Abdullah Alsultan, Dean, College of Computing and Mathematics (CCM), KFUPM

Abdullah Albuali, KSA AI Manager, SLB

Abdulmohsen AlAli, Geophysicist, Aramco

Ahmed Hussein, Global Innovation Manager (Drilling), SLB

Andreas Malikopoulos, Professor of Civil & Environmental Engineering, Cornell University

Youssef M. Marzouk, Professor of Aeronautics & Astronautics, MIT

Yogesh Bansal, Technical Manager - MENA, Landmark (Halliburton)

Moataz Ahmed, Associate Professor of Information & Computer Science, KFUPM

Peter Markowich, Al-Khawarzmi Distinguished Professor, KAUST

Benjamin Erichson, Senior Research Scientist, UC Berkeley/LBNL

Bilal Hungund, Sr. Data Scientist (Energy), Halliburton

Dhafer Alshehri, Chairman, Dept. of Petroleum Engineering, KFUPM

Dongxiao Zhang, Executive VP & Provost, Eastern Institute of Technology (EIT), Ningbo

Ernest Doh, Director of Exploration, Ma'aden

Fawwaz Al-Khaldi, Geological Consultant, Aramco

Ghaithan Al-Muntasheri, Director, EXPEC ARC, Aramco

DATA TO DECISIONS IN THE E&P

BRIDGING THE GAP WITH ML

KFUPM - DHAHRAN, KSA

FEB. 8-11, 2025



EVENT CONTRIBUTORS CONTINUED

H. Sebnem Duzgun, Chair Professor of Mining Engineering, Colorado School of Mines

Haibin Di, Sr. Data Scientist (Geophysics), SLB

Irfan Ahmed, Associate Professor of Information & Computer Science, KFUPM

John T. Foster, Chair Professor of Petroleum Engineering, UT Austin

Kayvan Najarian, Professor of Computational Medicine and Bioinformatics, University of Michigan

Matti Lassas, Professor of Mathematics and Statistics, University of Helsinki

Michael Pyrcz, Chair Professor of Engineering and Professor of Geosciences, UT Austin

Moataz Abu-Alsaud, Research Engineer (Reservoir Engineering), EXPEC ARC, Aramco

Modhar Khan, Regional Manager of Artificial Intelligence (MENA), SLB

Mohammad Alharthi, AI Engineer, Aramco

Ashwin Venkatraman, Founder and CEO, Resermine

Raied Aljadaany, Research scientist, SDAIA

Ruben Juanes, Professor of Civil & Environmental Engineering, MIT

Seba Al-Maghlouth, Head of Innovation and Digitalization in Petroleum Engineering, Aramco

Siddharth Misra, Professor of Petroleum Engineering, Texas A&M University (TAMU)

Sulaiman Ureiga, AI Engineer, Saudi Aramco

Sunil Manikani, Data Science Manager & Team Leader, SLB

Thamer Aldaajani, Manager of Mineral and Hydrocarbon Research Institute, KACST

Razen AlHarbi, Manager of Reservoir Engineering Systems Division, Aramco

Wenyi Hu, Data Science Advisor, SLB

LOGISTICS COMMITTEE

Jarvis Cline, Director of RSDS, College of Petroleum Engineering & Geosciences (CPG), KFUPM

Sameer Junaid, Senior DM Specialist, College of Petroleum Engineering & Geosciences (CPG), KFUPM

Eassa Abdullah, Director – CPG Laboratories, College of Petroleum Engineering & Geosciences (CPG), KFUPM

Shaikha Alsanad, Assistant Director of RSDS, College of Petroleum Engineering & Geosciences (CPG), KFUPM

Ruba Alkarnos, 3D Graphic Designer, College of Petroleum Engineering & Geosciences (CPG), KFUPM

Ibrahim Alobaidan, Senior HR Administrator, College of Petroleum Engineering & Geosciences (CPG), KFUPM

DATA TO DECISIONS IN THE E&P

BRIDGING THE GAP WITH ML

KFUPM - DHAHRAN, KSA

FEB. 8-11, 2025



EVENT OBJECTIVES

The main objectives of the event are:

1. Connect the E&P and the AI/ML communities.
2. Identify the grand challenges in E&P that could benefit from the rapid advancements in AI/ML.
3. Develop an AI/ML roadmap for the E&P.

Post-event objectives will include issuing a call for proposals on the identified related oil and mining industries' grand challenges. Proposals will be jointly submitted to the industry with in-kind match funding from KFUPM. The 2D matrix below is a depiction of some of the major intersections between the E&P and the AI/ML fields that will be explored during this event.

OPPORTUNITY MATRIX

		MACHINE LEARNING					
		Digital Twins	Operator Learning & Inference	Generative AI	Large Language Models	Data Assimilation & Forecasting	Unsupervised Learning
UPSTREAM E&P	Exploration						
	Drilling & Excavation						
	Resource Extraction						
	Asset Management & Monitoring						

DATA TO DECISIONS IN THE E&P

BRIDGING THE GAP WITH ML

KFUPM - DHAHRAN, KSA

FEB. 8-11, 2025



PROGRAM OVERVIEW

PUBLIC

Building 78

FEB. 8, 2025
SHORT COURSE &
STUDENTS' COMPETITION

7:45 - 8:30

Registration / Check-In

8:30 - 12:00

Short Course
Scientific Machine
Learning for the E&P

12:00 - 13:00

Lunch Break: Social Hour

13:00 - 15:00

(Student's Competition)
Data-Driven Decision
Making and Predictive
Modeling Using AI/ML
for the E&P

PUBLIC

Building 78

FEB. 9, 2025
INNOVATIONS IN
E&P & MINING

7:45 - 8:15

Registration / Check-In

8:15 - 8:30
Welcome note

8:30 - 10:30

Technical Session
Current Reality of AI/ML

10:30 - 11:30

Opening Ceremony -
Dr. Muhammad Al-Saggaf,
KFUPM President

11:30 - 13:00

Lunch Break: Social Hour

13:00 - 16:30

Technical Session
E&P Practice & Challenges

INVITE-ONLY

Building 78

FEB. 10, 2025
IDENTIFYING CHALLENGE
AREAS & ROADMAPING

7:45 - 8:30

Registration / Check-In

8:30 - 11:30

Panel Session
Overcoming
the Hurdles

10:45 - 11:30

Rapporturing on
the Panel Session

11:30 - 13:00

Lunch Break: Social Hour

13:00 - 15:00

Breakout Sessions
AI Roadmap for the E&P

15:00 - 15:30
Break

15:30 - 16:30

Joint Session
Overview of Findings
on AI Roadmap

7:00
Dinner

INVITE-ONLY

Dhahran Techno Valley

FEB. 11, 2025
CAPABILITIES RELATED
TO CHALLENGE AREAS

8:00 - 8:30

Light Breakfast

8:30 - 12:00

Tour of CPG Technology
Center Facilities and
Incubators

8:30 - 9:30

9:50 - 12:00

Short Presentations

12:15 - 14:00

Working Lunch
Planning the Way Forward

14:00 - 15:30

KFUPM Campus and
JRC-SDAIA Center Tour

DATA TO DECISIONS IN THE E&P

BRIDGING THE GAP WITH ML

KFUPM - DHAHRAN, KSA

FEB. 8-11, 2025



FEBRUARY 8TH *Saturday*

PUBLIC

BUILDING 78 - AUDITORIUM

08:30 - 12:00

Short Course

Data-Driven Decision Making and Predictive Modeling Using AI/ML for the E&P

Elements of Deep Learning: From Networks in Euclidean Spaces to Neural Operators and Transformers - *Maarten de Hoop - Rice University*

Generative AI for Scientific Machine Learning:

Modeling Spatio-Temporal Data - *Ben Erichson - UC Berkeley - Online*

Reinforcement Learning - *Moataz Ahmed - KFUPM*

Applications of SciML in Petroleum Engineering - *John Foster - UT Austin*

12:00 - 13:00

Lunch Break: Social Hour

13:00 - 15:00

AI/ML Competition

Data-Driven Decision Making and Predictive Modeling Using AI/ML for the E&P

Six to nine finalist teams will present their work applying machine learning solutions to challenge areas from: field production, exploration, and mining operations.

Problem Formulation Committee: *Nasher AlBinHassan - Aramco*
Mohammed Al-Harathi - Aramco
Suleiman Oreiga - Aramco
Salem Algharbi - Ma'aden
Umair Bin Waheed - KFUPM
Sunil Manikani - SLB

Extended Judging Committee: *Maarten de Hoop - Rice University*
H. Sebnem Duzgun - Colorado School of Mines
Youssef Marzouk - MIT
Michael Pyrcz - UT Austin
Hamed Saidaoui - Halliburton
Maad Aloweifeer - KFUPM
Dhafer Alshehri - KFUPM
Andreas Malikopoulos - Cornell University
Haibin Di - SLB
Matti Lassas - University of Helsinki
Kayvan Najarian - University of Michigan

DATA TO DECISIONS IN THE E&P

BRIDGING THE GAP WITH ML

KFUPM - DHAHRAN, KSA

FEB. 8-11, 2025



FEBRUARY 8TH - CONTINUED

PUBLIC

BUILDING 78 - AUDITORIUM

13:00 - 15:00

Student's Competition

Co-Chairs: *Nasher AlBinHassan - Aramco*
Salem Algharbi - Ma'aden
Umair Bin Waheed - KFUPM

13:00 - 13:10

Welcome & introductory remarks

13:10 - 13:25

Geophysical Exploration Challenge

Yang Cui & Alessandro Traversa - KFUPM

13:25 - 13:40

Geophysical Exploration Challenge

Jiahua Zhao - The Cyprus Institute

13:40 - 13:55

Mining Engineering & Operations Challenge

Mustapha Garba & Ahmad Lawal - University of Leeds and De Montfort University (UK)

13:55 - 14:10

Mining Engineering & Operations Challenge

Juan Rivera & Juan Vergara - National University of Colombia

14:10 - 14:15

Short break

14:15 - 14:30

Oil & Gas Challenge

Nweze Chimaobi - University of Port Harcourt (Nigeria)

14:30 - 14:45

Oil & Gas Challenge

Goodluck Archibong & Abdussamad Ali - KFUPM

14:45 - 15:00

Oil & Gas Challenge

Bayan Aldahlawi - KFUPM

15:00

Adjourn

DATA TO DECISIONS IN THE E&P

BRIDGING THE GAP WITH ML

KFUPM - DHAHRAN, KSA

FEB. 8-11, 2025



FEBRUARY 9TH *Sunday*

PUBLIC

BUILDING 78 - AUDITORIUM

7:45 - 8:15	Registration / Check-In
8:15 - 8:30	Welcome note
8:30 - 10:30	Technical Session Current Reality of AI/ML Co-Chairs: <i>Raied Aljadaany - SDAIA</i> <i>Moataz Ahmed - KFUPM</i>
8:30 - 8:45	ML Breakthroughs, Limitations, and Future Directions <i>Michael Mahoney - UC Berkeley</i>
8:45 - 9:00	Flow-based Methods for Inverse Problems: Structure, Scalability, and Guarantees <i>Youssef Marzouk - MIT</i>
9:00 - 9:15	Data-driven System Approaches for Cyber-physical Systems at the Intersection of Learning and Control <i>Andreas Malikopoulos - Cornell University</i>
9:30 - 9:45	New Trends in Artificial Intelligence and Machine Learning; Challenges and Opportunities in Biomedicine <i>Kayvan Najarian - University of Michigan</i>
9:45 - 10:00	Deep Learning for Seismology on Earth and Mars <i>Maarten deHoop - Rice University</i>
10:00 - 10:15	Learning in Low-Resource Problems <i>Irfan Ahmed - KFUPM</i>
10:15 - 10:30	Open Discussion
10:30 - 11:30	Opening Ceremony under the patronage of Dr. Muhammad Al-Saggaf, KFUPM President

11:30 - 13:00 **Lunch and Social Hour**

DATA TO DECISIONS IN THE E&P

BRIDGING THE GAP WITH ML

KFUPM - DHAHRAN, KSA

FEB. 8-11, 2025



PUBLIC

FEBRUARY 9TH - CONTINUED

BUILDING 78 - AUDITORIUM

13:00 - 16:30

Technical Session

E&P Practice & Challenges

Co-Chairs: *Abdullah Albuali - SLB*

Seba Al-Maghlouth - Aramco

13:00 - 13:15

Grand Challenge Areas for AI in the E&P

Nasher AlBinHassan - Aramco

13:15 - 13:30

Smart Mining: The Role of AI

Salem Algharbi - Ma'aden

13:30 - 13:45

Scientific Machine Learning for Modeling Multiphase Flows in Porous Media:
Application to Physical Experiments of CO₂ Injection

Ruben Juanes - MIT

13:45 - 14:00

Machine Learning and AI in Exploration and Mine Safety

H. Sebnem Duzgun - Colorado School of Mines

14:00 - 14:15

Scientific Machine Learning: Knowledge Embedding and Knowledge Discovery

Dongxiao Zhang - Eastern Institute of Technology, Ningbo - Online

14:15 - 14:45

Open discussion

14:45 - 15:00

Break

15:00 - 15:15

ML-Powered Strategies: Revolutionizing Affordable CO₂ Monitoring

Wenyi Hu - SLB

15:15 - 15:30

Scientific Machine Learning in Geophysical Exploration and Monitoring

Umair Bin Waheed - KFUPM

15:30 - 15:45

Fueling Innovation: Generative AI in Oil & Gas Data Digitalization

Bilal Hungund - Halliburton

15:45 - 16:00

Deep Learning tools for E&P Workflows

Siddharth Misra - Texas A&M University - Online

16:00 - 16:30

Open Discussion

DATA TO DECISIONS IN THE E&P

BRIDGING THE GAP WITH ML

KFUPM - DHAHRAN, KSA

FEB. 8-11, 2025



FEBRUARY 10TH *Monday*

INVITE-ONLY

BUILDING 78

08:30 - 11:30

Panel Session - Auditorium

Overcoming the Hurdles

Moderator: Motaz Al-Farraj - KFUPM

08:00 - 10:30

Panelists: Ali Al-Yousef - KFUPM

Razen AlHarbi - Aramco

Modhar Khan - SLB

Ghaithan Al-Muntasheri - Aramco

Thamer Aldaajani - KACST

Salem Algharbi - Ma'aden

10:30 - 10:45

Break

10:45 - 11:30

Rapporteur on the Panel Session - Auditorium

10:45 - 11:00

ML Reflections

Matti Lassas - University of Helsinki

11:00 - 11:15

Energy Transition

Fawwaz Al-Khalidi - Aramco

11:15 - 11:30

Sustainability in the E&P

Michael Pyrcz - UT Austin

11:30 - 13:00

Lunch and Social Hour

13:00 - 15:00

Parallel Breakout Sessions

AI Roadmap for the E&P

Coordinators : Mazen Kanj - KFUPM and Mohammed Al-Hamad - SLB

13:00 - 15:00

Exploration Track - Room 3018

Abdulmohsen AlAli - Aramco and Ernest Doh - Ma'aden

13:00 - 15:00

Drilling/Excavation Track - Room 3019

Ahmed Hussein - SLB

13:00 - 15:00

Resource Extraction Track - Room 3020

Yogesh Bansal - Halliburton and Sebnem Duzgun - Colorado School of Mines

13:00 - 15:00

Asset Management & Monitoring Track - Room 3021

Moataz Abulsaud - Aramco and Mustafa Kumral - McGill University

DATA TO DECISIONS IN THE E&P

BRIDGING THE GAP WITH ML

KFUPM - DHAHRAN, KSA

FEB. 8-11, 2025



FEBRUARY 10TH - CONTINUED

INVITE-ONLY

BUILDING 78

15:00 - 15:30 Break

15:30 - 16:30

Joint Session - Auditorium

Overview of Findings on AI Roadmap

15:30 - 15:45

Exploration Report

Abdulmohsen AlAli - Aramco and Ernest Doh - Ma'aden

15:45 - 16:00

Drilling Report

Ahmed Hussein - SLB

16:00 - 16:15

Resource Extraction Report

Yogesh Bansal - Halliburton and Sebnem Duzgun - Colorado School of Mines

16:15 - 16:30

Asset management Report

Moataz Abulsaud - Aramco and Mustapha Kumral - McGill University

DATA TO DECISIONS IN THE E&P

BRIDGING THE GAP WITH ML

KFUPM - DHAHRAN, KSA

FEB. 8-11, 2025



FEBRUARY 11TH *Tuesday*

INVITE-ONLY

DHAHRAN TECHNO VALLEY - COLLEGE OF PETROLEUM ENGINEERING & GEOSCIENCES TECHNOLOGY CENTER

8:30 - 12:00 Capabilities Related to Challenge Areas

8:30 - 9:30 Tour of CPG Technology Center Facilities and Incubators
Umair Bin Waheed - KFUPM and Jarvis Cline - KFUPM

9:30 - 9:45 College of Petroleum Engineering & Geosciences: Ecosystem & Global Partnership Initiative 2.0
Ali Alyousef - KFUPM

9:45 - 10:00 College of Computing & Mathematics: AI Capabilities & Strategies for Collaboration
Abdullah Alsultan - KFUPM

10:00 - 12:00 The Way Forward

Open Discussions on Action Items and Timeline Moving Forward

Moderator: *Mazen Kanj - KFUPM*

12:00 - 14:00 Short Presentations - **Working Lunch**

Ten-minute presentations by invited academics on their respective research group's strengths and capabilities, and on foreseen opportunities for collaborating with KFUPM on the challenge areas.

14:00 Adjourn

14:00 - 15:30 Campus Tour and JRC-SDAIA

DATA TO DECISIONS IN THE E&P

BRIDGING THE GAP WITH ML

KFUPM - DHAHRAN, KSA

FEB. 8-11, 2025



ADDITIONAL DETAILS

TECHNICAL SESSION: Current Reality

The session targets to explain what AI/ML can and cannot do. It demonstrates the type of problems that are most amenable to AI/ML application. The session also highlights AI/ML potentials and exposes the current limitations in industries like Space, Aerospace, Defense, Materials, Biomedicine, pharmaceutical, and robotics.

The discussions in this session will address themes such as:

1. Overview of AI/ML, including main branches of machine learning.
2. Current and future trends in machine learning.
3. Nature of problems that are amenable to successful ML application, and exploration of opportunities to address challenges in Exploration & Production.
4. State of the art and recent breakthroughs in other domains that will inspire new use of Machine Learning in Exploration & Production.

TECHNICAL SESSION: Practice & Challenges

This session introduces the Exploration & Production grand challenges to AI/ML practitioners and demonstrates current applications of machine learning in the E&P.

In this session, the following topics will be explored:

1. Grand challenges in the E&P that remain unaddressed or partially addressed (e.g. Reservoir Simulation, History Matching).
2. Additional grand challenges that have not yet been understood or properly framed for machine learning.
3. Discussion of what the E&P industry might gain from ML.
4. Lessons learned from applying AI/ML in the E&P – successes and failures.

DATA TO DECISIONS IN THE E&P

BRIDGING THE GAP WITH ML

KFUPM - DHAHRAN, KSA

FEB. 8-11, 2025



PANEL SESSION: Overcoming the Hurdles

The session discusses collaboration issues between the AI/ML scientists and E&P/Mining professionals and researchers and debates ideas to help leverage the large funds in AI from the medical and technology industries for use in the E&P.

Throughout this session, the following questions will be examined:

1. How do we attract AI/ML practitioners into collaborating with E&P professionals to address the E&P challenges?
2. Is the AI/ML community aware of the E&P technical challenges?
3. Can the E&P industry utilize or adapt for its own use AI/ML-technologies developed by/for other industries? What types of E&P challenges are most suitable for AI-based solutions?
4. Is AI adoption in the E&P an evolution or a revolution?
5. How to optimize collaboration between the two communities? Should funding be the main incentive to collaborate?
6. Where and how can AI be used in the Upstream E&P? What AI branches can benefit the E&P industry the most?
7. What are the prospects of Artificial General Intelligence in Engineering?
8. Future of AI in E&P Education - How will AI influence the future of E&P education and program development? Courses development and assessments taking into consideration the wide accessibility to AI/ML by students.
9. Should E&P be a leader for AI innovation or simply a user?
10. How do we bridge the valley of death in the innovation process in the E&P from incubation to technology adoption?

BREAKOUT SESSIONS

AI/ML technology roadmaps for the four E&P breakout sessions target formulating AI roadmaps in all four categories of the E&P. Sessions will run in parallel. These are led by Discussion Leaders on Exploration, Drilling and Excavation, Production and Extraction, and Asset Management and Monitoring with consideration for sustainability impact (e.g., geothermal, CO₂ sequestration and utilization, lithium mining, and hydrogen storage). The collective objective is to develop the opportunity matrix (displayed under "EVENT OBJECTIVES" above) over different R&D time scales.

DATA TO DECISIONS IN THE E&P

BRIDGING THE GAP WITH ML

KFUPM - DHAHRAN, KSA

FEB. 8-11, 2025



CONTRIBUTING ORGANIZATIONS



هيئة تنمية البحث
والتطوير والابتكار
Research Development
and Innovation Authority





Building 78 Address:

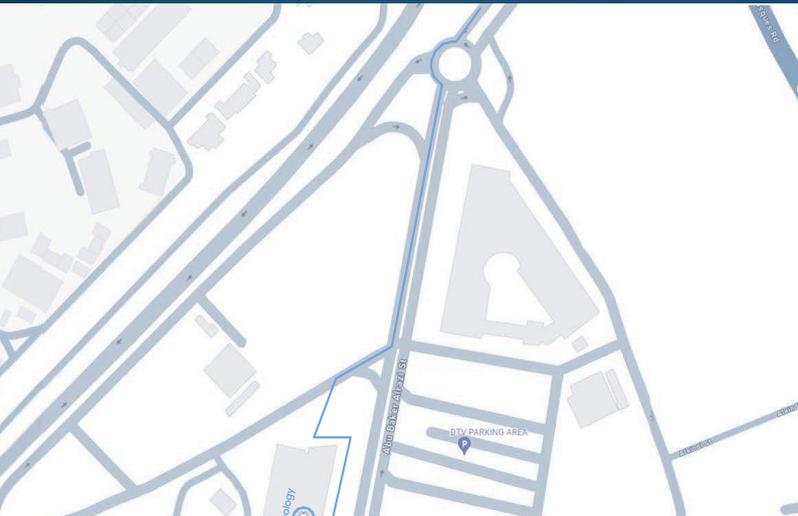
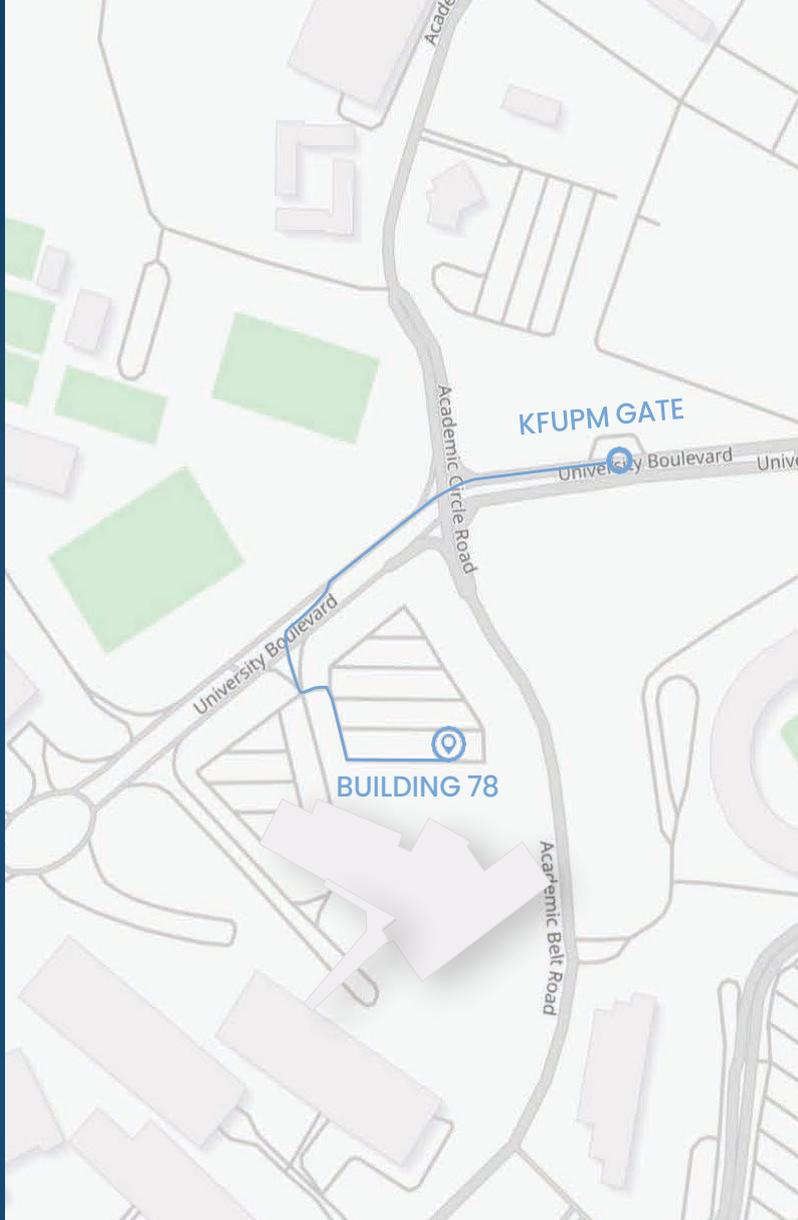
College of Petroleum Engineering & Geosciences - Building 78

844X+F9P, KFUPM, Dhahran 34463

SCAN FOR DIRECTIONS:



 Dress Code: Business Casual



CPG Technology Center in DTV Address:

ADDRESS:

CPG Technology Center - Dhahran Techno Valley

4589 Abu Baker Alrazi St, KFUPM, 8650, Dhahran 34464

SCAN FOR DIRECTIONS:

