



AI Data and Cloud Hackathon Meet and Greet with Students

Building the Technology Assets of the Future

Meet the Omnia Cloud Hackathon Planning Team



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Hackathon Sponsor



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Hackathon Lead



Alisha Bhutani
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Hackathon Coordinator



Kristina Gerke
Consultant, Omnia AI
Hackathon Coordinator



Aris Aristorenas
Consultant, Omnia AI
Hackathon Coordinator

Agenda

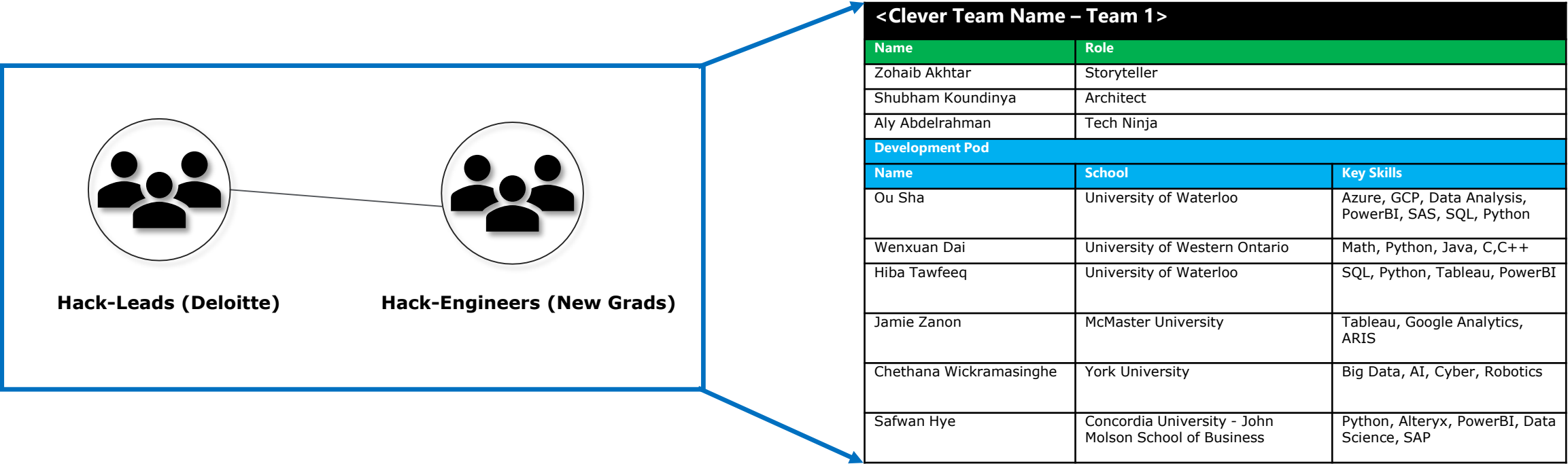
Objective of today's session is to provide details about the Hackathon, it's structure and timeline

- ❑ Team structure
- ❑ Timeline
- ❑ Agenda for the 3 days of the hackathon
- ❑ Overview of judging
- ❑ List of all problem statements
- ❑ Teams go into breakout rooms, discuss strengths, and meeting cadence
- ❑ Teams announce a team lead, and name of their team
- ❑ Q&A

Team structure

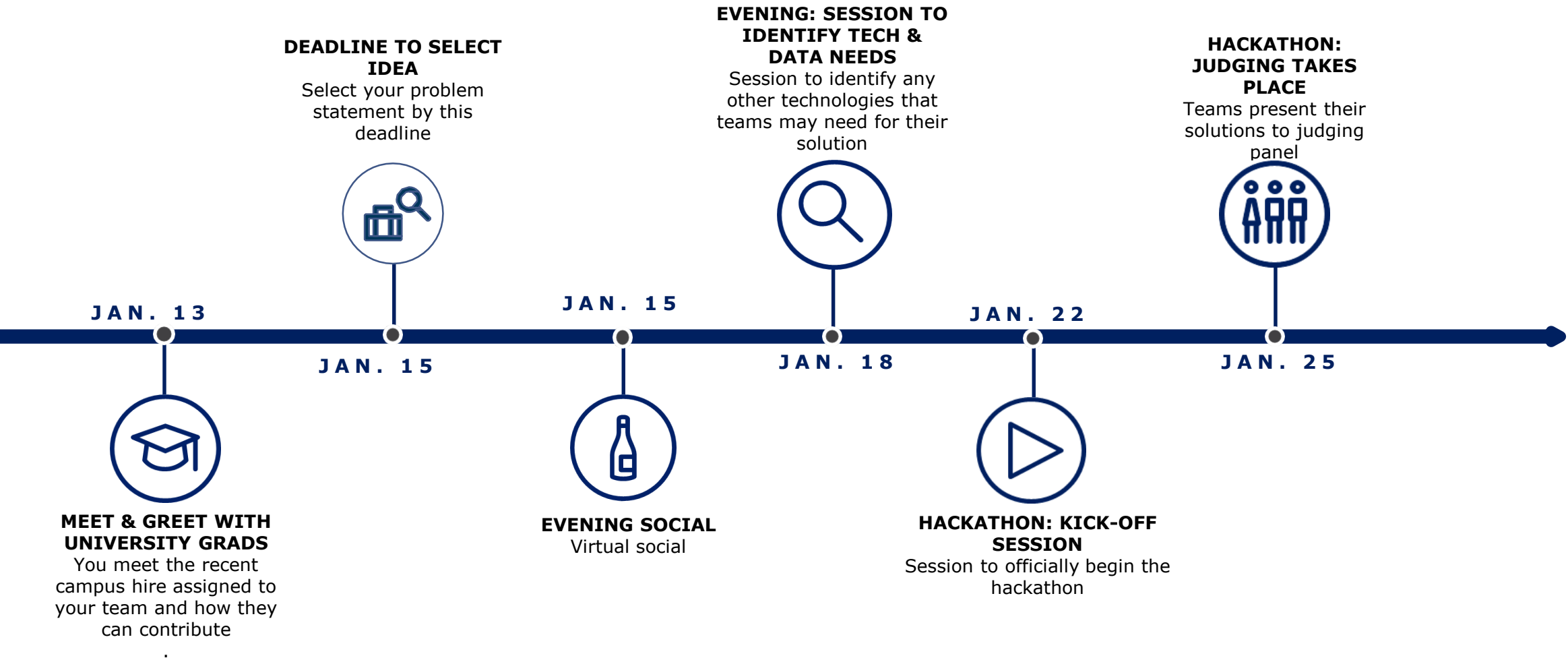
Each team will follow Deloitte’s POD structure made up of Deloitte practitioners, and university students

- Each team is made up of: 5-6 students (Hack-Engineers), together with 3-4 Deloitte Practitioners (Hack-Leads)



Timeline

Remaining key dates



* Vote will take place today

Agenda of 3 days of Hackathon (Jan. 22 – 24)

Breakdown of key events during hackathon

Jan 22 nd - Day 1	
Timing (ET)*	Activity
4:00pm – 4:30pm	Welcome and team meet and greet
4:30pm – 6:00pm	Begin designing your solution
6:00pm – 7:00pm	Break for dinner
7:00pm – 9:00pm	Begin hacking
Jan 23 rd - Day 2	
9:00am – 9:15am	Warm up, recap, & submission of questions for forums
9:15am – 10:00am	Keep hacking
10:00am – 12:00pm	Open-forum session with Omnia advisors
12:00pm – 1:00pm	Lunch
1:00pm – 2:30pm	Keep hacking
2:30pm – 3:15pm	Power Hour with an Azure tech guru
3:15pm – 4:30pm	Open-forum session with Azure tech gurus
4:30pm – 4:45pm	Break
4:45pm – 6:45pm	Keep hacking
6:45pm – 7:00pm	Wrap up

Jan 24 th - Day 3	
Timing (ET)	Activity
9:00am – 9:15am	Warm up, recap & submission of questions for forums
9:15am – 10:00am	Keep hacking
10:00am – 10:45pm	Power Hour with an AWS tech guru
10:45am – 12:00pm	Open-forum session with AWS tech gurus
12:00pm – 1:00pm	Lunch
1:00pm – 1:45pm	Power Hour with a GCP tech guru
1:45pm – 3:00pm	Open-forum session with GCP tech gurus
3:00pm – 3:30pm	Keep hacking
3:30pm – 5:00pm	Solution wrap-up and demo prep
Jan 25 th	
3:00pm – 4:30pm	Elevator pitches / demos**
4:30pm – 4:50pm	Judges' deliberation
4:50pm – 5:00pm	Announcement of winners

***10 mins per team and 5 mins for Q/A.*

Overview of Judging Process

On the last day of the Hackathon, our Judges' Panel will view the Team Presentations and score based on the following criteria

Category	Parameters	Points	Description
BUSINESS SOLUTION	Feasibility	30 PTS	The solution is solvable through the use of new Machine Learning techniques.
	Flexibility		The solution can be adapted to various circumstances or parameters common to the problem described.
	Completeness		The solution solves for the full suite of issues described in the problem statement.
TECHNICAL FEASIBILITY	Clarity of Technical Solution	20 PTS	The developed PoC can be broken down and described to others in a way that makes sense.
	Feasibility of PoC Build-Out		Is this a solution that can be developed over the collapsed timeline?
	Scalability		Once built, this solution could be expanded to work for larger data sets without major impacts to quality, cost, or implementation.
DEVELOPMENT	Creativity/Originality	25 PTS	Is the core of the developed product a creative or unique solution? (Consider the algorithms / underlying code used.)
	Use of Technology		Does the solution effectively use technology to improve the quality of the product / solution?
	Usability		Could a nontechnical user understand and use this product effectively? Is it user friendly?
	Financials		How can the solution be monetized (e.g. as an accelerator or a managed service subscription)?
ELEVATOR PITCH	Use Case	25 PTS	Was the use case described a viable business problem?
	Clarity		Was the presentation clear and concise taking us through problem, development, solution, and use?
	Polish		Could we put this in front of client?

Total: 100 PTS

12 problem statements for the hackathon

Example problem statements for the hackathon, and their descriptions

No.	Problem Statement	Description
1	Enhanced Extraction	Capturing rev block and / or engineering symbol data to improve overall data set capture
2	OCR capabilities	Establish common and differentiated OCR capabilities with GCP and AWS
3	AutoCAD native format information extraction	Prototype the ability to process source information from native AutoCAD drawings via API or .DWG document processing
4	Insights into medical notes	Using voice recognition and machine learning to parse medical notes for insights into diagnosis, medication, etc.
5	Optimized vaccine distribution	Using COVID testing-related characteristics to better understand how we can optimize the distribution of vaccines
6	Insights into medication non-adherence	Using ML to better understand predictors of non-adherence, i.e., what are the drivers leading to patients not taking their medication
7	Evolution of Diseases	An AI model that predicts the evolution and growth of disease burden across Canada, i.e., where are certain chronic diseases increasing and decreasing over the span of 5 years
8	Social Economic Impact	Visualizing social economic impact of flooding and population displacement in large city centers
9	Energy Consumption usage	How to identify best rerouting power grids during an outage to attain optimal cost and energy footprint
10	Sentiment Analysis	Citizen sentiment analysis with water quality dispatch events response times
11	Impact on Property Costs	How does lead piping impact property assessment replacement costs with aging homes
12	Data-driven improvements to continuing education	Generating career insights based on market/labor data, and analysis on curriculum improvement

List of team members

<Clever Team Name – Team 1>		
Name	Role	
Zohaib Akhtar	Storyteller	
Shubham Koundinya	Architect	
Aly Abdelrahman	Tech Ninja	
Development Pod		
Name	School	Key Skills
Ou Sha	University of Waterloo	Azure, GCP, Data Analysis, PowerBI, SAS, SQL, Python
Wenxuan Dai	University of Western Ontario	Math, Python, Java, C,C++
Hiba Tawfeeq	University of Waterloo	SQL, Python, Tableau, PowerBI
Jamie Zanon	McMaster University	Tableau, Google Analytics, ARIS
Chethana Wickramasinghe	York University	Big Data, AI, Cyber, Robotics
Safwan Hye	Concordia University - John Molson School of Business	Python, Alteryx, PowerBI, Data Science, SAP

<Quaranteam>		
Name	Role	
Michael Abate	Architect	
Chitresh Pandey	Tech Ninja	
Mustafa Tariq	Moneymaker	
Development Pod		
Name	School	Key Skills
Mohammed Perves	Wilfrid Laurier University	Python, C#,C++, Tableau, PowerBI, AWS, Azure, Keras
Aboubacar Doumbia	Carleton University	React, javascript, Python, SQL, SAP
Michael Bradshaw	University of Western Ontario - Richard Ivey School of Business	Python, R, SWL, Tableau, NoSQL, Hadoop,
Joane Osei Owusu	Concordia University - John Molson School of Business	Human Capital
Dhruv Mehanderatta	University of New Brunswick, Fredericton	JAVA, C#, Python, R , SQL , C,
Kimberly Wang	Western University Ivey Buisness School	Marketing, Project Management

<AI Octopi>		
Name	Role	
Jonathan Kovacs	Architect	
Geoffrey Clark	Tech Ninja	
Matt Hughson	Business	
Development Pod		
Name	School	Key Skills
Abdullah Asif	Brock University	javA, C#,C++, Python, Azure
Rena Yang	University of Western Ontario - Richard Ivey School of Business	Tableau, SQL, R , Google Analytics
Zihui Qin	University of Waterloo	React, Python, SQL, MatLab, C
Rui Zhou	University of Toronto - St. George	C,C++, Python, Java, SQL, TensorFlow
Olivia Boucher	University of Western Ontario - Richard Ivey School of Business	Project Management, Requirements
Moustafa Shaker	University of Western Ontario	Data Science, Data Eng, Data Analysis

<Team Hydration>

Name	Role	
Pritish Chamania	Architect	
Mark Du	Business	
Shahzeb Afroze	Tech Ninja	
Hiba Tawfeeq	Storyteller	
Development Pod		
Name	School	Key Skills
Pedram Fardnia	Concordia University	Econometrics, Financial Modelling, Data Analysis
Erik Liang	University of Waterloo	Python, R, PowerBI
Ayesha Shoaib	University of Guelph	Data Science, Data Eng, Data Analysis, ML
TBD	TBD	TBD
Traky Deng	McMaster University	Azure, Tableau, SAS, Python

<Heads in the cloud>		
Name	Role	
Debraj Das	Tech Ninja	
Mustufa Jan	Storyteller	
Marc Lockhead	Architect	
Development Pod		
Name	School	Key Skills
TBD	TBD	TBD
Jiakai Tang	University of Waterloo	Python, R, SQL
TBD	TBD	TBD
JONATHON NAGASSAR	York University	Azure, Python, Nodejs, AWS
Michael Gesuale	University of Toronto - Mississauga	JavaScript, Python, Java, SQL, PHP, Ruby, React
Xinyi Zhang	University of British Columbia (UBC)	TensorFlow, Pandas, Numpy, Python, Ruby, NLTK

<Pandemic Pals>		
Name	Role	
Naz Ahmed	Business	
Deepak Sharma	Architect	
Kachi Nwamuo	Architect	
Sina Esmaeili	Tech	
Development Pod		
Name	School	Key Skills
Tony Li	University of British Columbia (UBC)	Data Science, AI/ML, Data Mining, TensorFlow, NLP, AWS
Akhil Tadimetri	University of Victoria	Python
Harry Chauhan	University of Alberta	C,C++, Python, Matlab SQL, Azure
Helen Mak	University of Victoria	Tableau, PowerBI, SAS, Salesforce
Eric Jiang	University of Waterloo	Data Science, Python, SQL, R, SAS, PySpark

<Cirrus Cloud 9>		
Name	Role	
Noah Sommerfeld	Tech Ninja	
Michael Han	Storyteller	
Luc DeGagne	Architect	
Development Pod		
Name	School	Key Skills
Yan Yan	York University - Schulich School of Business	AWS, Python, R , SAS, SQL , Tableau, GCP
Inderjeet Dhari	Southern Alberta Institute of Technology	PowerBI
Iram Malik	University of British Columbia (UBC)	PowerBI, SolidWorks, SQL, Python, C, Matlab
Chandula Kodituwakku	University of Victoria	Cyber Secuyrity, AWS
Usman Arogundade	University of Manitoba	JAVA, C#,C++, Python, SQL, React, Git

Teams to go into breakout rooms

Format of final presentation delivery, and guidelines



Teams will now go into breakout rooms (40-mins). Please introduce yourselves to your team, and discuss:

1. Introductions/Icebreaker
2. Decide on a team spokesperson
3. Decide on a team name
4. Decide on business problems of interest
5. Meeting cadence & pre-planning prior to hackathon
 - a. Deadline to select business problem: Jan. 15
 - b. Select technologies: Jan. 18
 - c. Kick-off: Jan. 22



When finished, gather back to the main room and announce your team lead, and name!



Come to hack in the name of doing something crazy and fantastic.



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