

BOOTCAMP 2025 CASE PACKAGE



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BOLT UBC MASCOT

Disclaimer



It is the competitors' responsibility to review and uphold applicable standards of fair competition.

Instances of misconduct, such as cheating, plagiarism, resubmitting the same code/slides, or impersonating a candidate, will result in the competitor and their team being automatically disqualified.

If you have any questions, please reach out to us at: boltubc@gmail.com

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Competition Schedule



February 24, 2025, Monday

Registration Closes

February 26, 2025, Wednesday

5:00 PM - Case Release

March 1, 2025, Saturday

Workshop & Networking Event

March 4, 2025, Tuesday

- 12:00 AM Case Submissions Open
- (tentative) Online Presentation Workshop

March 5, 2025, Wednesday

- 12:00 PM Case Submission Due
- 6:00 PM Semi-Finalist Announcement

March 8, 2025, Saturday

Presentation Day

Competition Schedule



Workshop + Networking Event

Date: March 1st (Saturday)

Time: 11:30 - 4:00 PM

Location: UBC Sauder School of Business

Workshop Hosts:

- Cornelius van Heerden (Data Analytics and Al Expert @Google)
- Souraya Mansour Mitri (Director Data and Analytics @YMCA BC)
- Sreeya Iyer (Product Specialist @TELUS)

Panelists:

- Cornelius van Heerden (Data Analytics and Al Expert @Google)
- Harsh Otwani (Al And Data Manager @EY)
- Lina Ben-Harhara (Vice President @J.P. Morgan)
- Philip Ko (Software Developer @Amazon)
- Shoolin Saini (Software Engineer @Yelp)
- Siddharth Grover (Chief Product Officer @DYNE)
- Souraya Mansour Mitri (Director Data and Analytics @YMCA BC)
- Sreeya Iyer (Product Specialist @TELUS)

Competition Schedule



<u>Workshop + Networking Event</u>

11:30 AM - 11:45 AM	Registration
11:45 AM - 12:00 PM	Opening Remarks
12:00 PM - 1:00 PM	Breakout Room Workshops
1:00 PM - 1:30 PM	Open Networking
1:30 PM - 1:45 PM	Club & Panel Introduction
1:45 PM - 2:30 PM	Panel Discussion + Q&A
2:30 PM - 3:15 PM	Games in Teams with Professionals
3:15 PM - 3:30 PM	Lunch
3:30 PM - 4:00 PM	Open Networking

Competition Schedule



Presentation Day

Date: March 8th (Saturday)

Time: 12:00 - 5:30 PM

Location: UBC Sauder School of Business

Judges:

• Firas Fakih (Senior Data Analyst @EY)

• Lina Harara (Vice President @J.P. Morgan)

Md Nafize Sadik (Data Scientist III @Boeing)

Nicolas Taveira (Software Engineer II @Microsoft)

Parin Shah (Lead Data Engineer @Chime)

Sarang Gupta (Staff Data Scientist, ML and Al @Asana)

• Shikha Soni (Software Engineering Manager @Google)

12:00 PM - 12:15 PM	Registration
12:15 PM - 2:00 PM	Breakout Room Presentations
2:00 PM - 2:15 PM	Finalist Announcement
2:15 PM - 3:00 PM	Lunch
3:00 PM - 4:15 PM	Finalist Presentations
4:15 PM - 4:45 PM	Awards Announcement
4:45 PM - 5:15 PM	Networking & Professional Feedback
5:15 PM - 5:30 PM	Closing Remarks

Case



Introduction

Peak Mountain Resort is at a crossroads, balancing its reputation as a top mountain destination with the need to address growing challenges. Surrounded by stunning alpine landscapes, the resort has built its brand on offering thrilling outdoor adventures and family-friendly experiences year-round. From skiing and snowboarding in the winter to hiking, biking, and zip-lining in the summer, Peak Mountain Resort provides activities for all ages and skill levels. At its core, the resort values adventure, safety, and sustainability, striving to create unforgettable experiences while ensuring that guests feel welcome and secure. The resort's goal is to remain a leading all-season destination, offering high-quality services while also protecting the natural beauty that makes it special.

However, management now faces increasing challenges that put both guest safety and financial stability at risk. Aging infrastructure, rising operational costs, and seasonal safety concerns have made it difficult to keep up with industry demands.

To address these pressing issues, Peak Mountain Resort has turned to you and your consulting team for strategic solutions. Your team has been tasked with developing a comprehensive, data-driven plan to enhance guest safety, optimize emergency response times, and ensure financial sustainability, all while preserving the resort's signature experience.

Case



Industry Overview

The mountain resort industry is a dynamic segment of the tourism and hospitality market, characterized by strong seasonal demand and diverse offerings. In winter, activities like skiing and snowboarding draw large crowds and generate substantial revenue, but also introduce heightened safety risks due to high speeds, icy conditions, and challenging terrains. In summer, resorts pivot to hiking, mountain biking, and climbing, while spring and autumn present their own unique challenges with fluctuating weather and reduced visitor numbers.

Key industry challenges include:

- Safety and Liability: Both high-speed winter sports and rugged summer trails pose significant risks, driving up insurance costs and legal liabilities.
- **Remote Locations**: Mountainous terrain often limits rapid access to advanced medical facilities, resulting in longer emergency response times.
- **Cost Pressures**: Maintaining capital-intensive infrastructure, such as ski lifts, trails, and on-site facilities, requires continuous investment.
- **Competitive Landscape**: Larger resort chains with economies of scale put pressure on smaller, independent resorts to deliver exceptional guest experiences while managing costs effectively.

Maintaining a reliable safety record is not only a moral imperative but also essential for sustaining profitability and protecting a resort's reputation in an industry where guest satisfaction and word-of-mouth play crucial roles.

Case



Company Overview

Peak Mountain Resort is a medium-sized, year-round destination nestled in a scenic mountainous region. Traditionally reliant on winter sports like skiing and snowboarding, the resort has diversified its offerings by expanding into summer activities, including hiking, mountain biking, and family-friendly adventure programs. Additionally, the resort hosts several facilities and exhibitions, such as indoor climbing walls, guided tours, and educational displays on local flora and fauna, to enhance guest experiences and generate extra revenue.

Despite these efforts, the resort faces ongoing financial pressures due to:

- **Aging Infrastructure**: Essential assets such as ski lifts, trails, signage, and lodge facilities require modernization to meet contemporary safety and service standards.
- Rising Operational Costs: Increased expenditures on staff training, rescue patrols, equipment maintenance, and insurance premiums are stretching the resort's budget.
- **High Safety Liabilities**: Incidents, ranging from minor sprains to severe injuries and fatalities, pose substantial ethical and financial risks, potentially leading to costly lawsuits and higher insurance premiums.

Case



Located in a remote mountainous region, Peak Mountain Resort faces critical challenges with emergency response times. While onsite ski patrols and first-aid stations provide immediate care, severe injuries, such as fractures, head trauma, or cardiac events, require hospital treatment, which is hours away. Winter snowstorms and icy roads further delay ambulances, while remote summer trails make rescues difficult. Helicopter evacuations, though an option, are costly and limited. These delays increase medical risks, liability concerns, and reputational damage. To improve safety, the resort must implement season-specific preventative measures, optimized triage, and faster rescue operations.

Current Product Offerings

Winter Activities

- **Skiing & Snowboarding**: Lift-accessed downhill skiing, terrain parks, and groomed runs.
- Cross-Country Skiing: Designated trails through forests and valleys for a quieter experience.
- **Snowshoeing**: Guided or self-guided exploration of snowy landscapes.
- **Sledding & Tobogganing**: Family-friendly downhill fun, with some locations offering night sledding.
- Ice Skating: Outdoor rinks for guests of all ages.
- Dog Sledding & Snowmobiling: Guided experiences for adventure seekers.
- Fat Biking: Biking on groomed snow trails, an emerging winter trend.

Case



Summer Activities

- **Hiking & Trail Running**: Extensive trails for all skill levels, from scenic nature walks to high-altitude trekking.
- **Mountain Biking**: Lift-served downhill bike parks and cross-country trail systems.
- **Climbing & Bouldering**: Outdoor climbing routes with guided instruction available.
- **Via Ferrata**: Fixed-cable climbing routes for thrill-seekers with built-in safety measures.
- **Zip-Lining & Adventure Parks**: High-altitude rope courses and zip-line experiences.
- Whitewater Rafting & Kayaking: Nearby mountain rivers offer guided rafting excursions.
- Paragliding & Hang Gliding: Tandem flights with professional instructors for panoramic mountain views.

Lodging & Guest Services

- **Ski-in/Ski-out Accommodations**: On-mountain lodges, hotels, and rental cabins.
- **Dining & Après-Ski Experiences**: Mountain-view restaurants, casual cafés, and après-ski lounges.
- **Wellness & Spa Services**: Full-service spa with massages, thermal pools, and relaxation areas.
- Retail & Rental Shops: Outdoor gear, branded apparel, and adventure equipment rentals.

Case



Educational & Cultural Exhibits

- **Mountain Discovery Center**: Showcasing local ecology, wildlife, and alpine history.
- **Guided Nature Walks & Survival Skills Training**: Family-friendly educational experiences.
- **Astronomy Nights & Seasonal Events**: Interactive programs focused on stargazing and environmental conservation.

Case



Current Safety Measures & Medical Partnerships

Peak Mountain Resort prioritizes guest safety by maintaining a dedicated in-resort medical response system for handling minor injuries and coordinating emergency care for more serious incidents. The resort operates on-site first-aid stations strategically located near high-traffic areas, including ski lifts, base lodges, and adventure parks. These facilities are staffed by trained ski patrol teams, paramedics, and emergency responders, equipped to treat common injuries such as sprains, minor fractures, cuts, and dehydration. Additionally, resort staff are trained in basic first aid and CPR to assist guests in emergencies.

For severe injuries requiring hospital care, Peak Mountain Resort has an established partnership with a regional medical center located at the base of the mountain, approximately 45 minutes away by ambulance. This affiliated hospital specializes in trauma care and regularly coordinates with resort medical teams to ensure fast-track admissions and pre-hospital communication. While ambulance response times remain a challenge due to mountain terrain and weather conditions, the resort has designated transport routes for emergency vehicles and collaborates with helicopter evacuation services for critical cases when ground transport is impractical.

Despite these measures, response times remain a concern, particularly during peak ski and summer seasons when guest injuries increase and road conditions may slow medical transport.





Open Questions for Participants

- 1. **Seasonal Safety Strategies**: How should safety measures differ between winter, summer, spring, and autumn to address unique risks and weather conditions?
- 2. **Infrastructure vs. Operations**: Given tight budgets, where should the resort allocate resources first?
- 3. **Financial Trade-Offs**: What cost-effective solutions can be proposed to balance the high price of maintaining multiple exhibitions, attractions, and advanced safety protocols?
- 4. **Emergency Response Improvements**: How can the resort reduce ambulance wait times and improve triage, especially in its remote location?
- 5. **Long-Term Resilience**: What data-driven insights could help forecast future safety needs, reduce liability, and maintain stable revenue across all four seasons?





Key Ask

Peak Mountain Resort operates year-round, offering a range of seasonal activities that attract visitors but also introduce significant safety risks and operational challenges. With increasing injury rates, extended emergency response times, aging infrastructure, and financial constraints, the resort must find a way to improve guest safety without compromising its budget or long-term viability.

The key question is: **How can Peak Mountain Resort implement cost-effective, data-driven safety measures and ensure financial sustainability?**





Data Description

This case package includes three datasets:

- **expenses.csv** contains 2,000 entries detailing the resort's revenue and expenses.
- **incidents.csv** includes 1,000 entries on medical incidents at the resort, capturing details such as activity type, severity level, and resolution time.
- **reviews.txt** consists of unstructured customer feedback, offering insights into guest satisfaction and common concerns.
 - A 15-mark bonus is available for using NLP tools to analyze reviews.txt. <u>However, large language models (LLMs) do not qualify</u> <u>for this bonus.</u> Refer to Judging Criteria for details.

Case Deliverables



Guidelines and Deadline

A slide deck of analysis of the issues, possible alternatives, and final recommendation(s) that will accompany your presentation if you make it past qualifiers. Each team will have **10 minutes to present** and 5 minutes of Q&A.

Naming convention: <Team Name>.pdf

Example: Team 1.pdf

• File Format: PDF ONLY

Please upload your submission to boltubc.com by March 5th, Wednesday, 12:00 PM (noon)

- ONLY ONE team member has to upload the submission.
- Note that NO changes are allowed after the submission deadline. The same slide deck will be used on Presentation Day.
- No late submissions will be accepted.

Case Deliverables



Judging Criteria

Data Analysis	30%
Business Recommendation	25%
Presentation Delivery	30%
Bonus	15%

- We recommend taking screenshots of your data analytics takeaways and embed those insights into your presentation.
- A 15-mark bonus is available for using **NLP tools** to analyze reviews.txt. However, large language models (LLMs) do not qualify for this bonus.
 - Up to 10 marks will be given based on the clarity and depth of the methodology, including how participants extracted and analyzed sentiment data.
 - Up to 5 marks will be awarded for effectively incorporating insights from the NLP analysis into their recommendations.

Case Deliverables



First Round

Case submissions will be evaluated and the Semi-Finalist teams will be announced. Your team will be notified via Email by 6:00 PM on March 5th, Wednesday if you have passed this round.

Semi-Finalist teams will be invited to present their case submission live in Henry Angus on March 8th in front of a panel of judges.

Semi-Finalist Round

All Semi-Finalist teams will be divided into 4 different judging breakout rooms randomly. Each room will have approximately 5 teams.

Due to the tight schedule, late teams will be disqualified.

Each team will have 10 minutes to present and 5 minutes of Q&A.

The breakout room judges will select the top team in their breakout room to advance to the Final Round.

Final Round

Finalist teams will present to a panel of judges. Each team will have 10 minutes to present and 5 minutes of Q&A.

Partners



- UBC AI
- UBC AI Safety
- Undergraduate Statistics Society (USS)