



SESSION ABSTRACTS

2026 Gurobi Decision Intelligence Summit

September 22–23 · ARIA Resort & Casino, Las Vegas

WWW.GUROBI.COM

Behind Every Great Decision

Day One · Tuesday, September 22, 2026

Registration · Primrose Ballroom Foyer

07:30AM–08:30AM

Welcome · Primrose Ballroom

08:30AM–08:40AM

GENERAL SESSION

08:40AM–09:00AM · Primrose Ballroom

Gurobi Keynote

Duke Perrucci, CEO (Gurobi Optimization)

Hear the latest Gurobi Optimization news and updates from CEO Duke Perrucci.

GENERAL SESSION

09:00AM–09:30AM · Primrose Ballroom

Gurobi Product Roadmap: The Road Ahead - Optimization in the Age of AI

Dr. Oliver Bastert, CTO (Gurobi Optimization)

As AI changes how organizations approach complex problems, mathematical optimization remains the rigorous foundation for producing defensible decisions that businesses can trust. In this session, Oliver Bastert will review the progress of the past year across Gurobi's products and look ahead at the roadmap for the next generation of decision-making. He will talk about continued improvements in the core Optimizer—performance, algorithmic research, and the use of modern hardware—as well as better support for more problem classes.

He will also introduce the Gurobi AI Innovation Lab, where Gurobi combines AI and optimization to deliver results under near real-time constraints. On the GenAI side, there are two important directions: these tools can make it easier for more practitioners and domain experts to build and deploy optimization models, and also help experienced users build, debug, and work with their models more easily in daily use.

Together, these advances and this future direction enable better decision-making in an increasingly complex world.

Coffee Break · Primrose Ballroom

09:30AM–09:50AM

GENERAL SESSION

09:50AM–10:35AM · Primrose Ballroom

Gurobi Keynote: Adoption & Impact Driving Trusted Decisions

Jennifer Locke, Manager of Technical Account Management-Americas (Gurobi Optimization); Zed Dean, Senior Technical Account Manager (Gurobi Optimization)

The best decision should always be one that stakeholders trust. Successful organizations combine mathematical rigor with transparency and explainability to create decisions that people are willing to adopt and act upon. Let's examine how optimization helps bridge that gap, transforming analytical insight into trusted outcomes.

GENERAL SESSION

10:35AM–11:05AM · Primrose Ballroom

Partner Keynote: Princeton Consultants and The New York Independent System Operator - No Turning It Off: What It Takes to Trust a Model You Can Never Roll Back

Robert Randall, Senior Optimization Specialist (Princeton Consultants); Kevin Pytel, Director, Product and Project Management (The New York Independent System Operator (NYISO))

Ask the New York ISO (NYISO) what happens after a market decision goes out, and you find there is no undo. "It is trusted to the point that it is running," says Kevin Pytel, Director, Product and Project Management at NYISO. "There is no turning it off."

Kevin Pytel of NYISO and Rob Randall of Princeton Consultants will share how trust is earned when model results have real-world market consequences. NYISO relies on a disciplined approach that combines rigorous analysis, testing, carefully designed safeguards, expert operational oversight, and extensive stakeholder and regulatory engagement, starting with an approval path that runs through market participants and FERC long before any code exists. Conservatism is engineered in rather than handled downstream. Attendees will gain insight into the processes that transform an optimization model from a mathematical solution into a trusted operational system.

Networking Lunch & Partner Exhibition · South Primrose Veranda

11:05AM–12:30PM

TECHNICAL USE CASE TRACK

12:30PM–01:00PM · Joshua 5&6

What's New in Gurobi 14.0

Dr. Ed Klotz, Senior Mathematical Optimization Specialist (Gurobi Optimization)

Gurobi 14.0 provides major performance improvements across most problem categories: from LPs to MIPs and MINLPs, on both CPUs and GPUs, for long-established algorithms such as dual simplex as well as newer additions such as PDHG, whether you seek a local optimum, a global one, or simply a good solution in the time available.

It is also easier to use, offering greater flexibility in combining its various algorithms and gaining insights into how your model was solved.

Attendees will learn about the advances behind some of these performance improvements and how best to apply Gurobi 14.0 to their business problems.

BUSINESS USE CASE TRACK

12:30PM–01:00PM · Joshua 9&10

Optimization Champions: Winning Over Skeptics, Driving Adoption

Jerry Yurchisin, Sr. Data Science Strategist (Gurobi Optimization)

You know the value optimization can deliver and oftentimes the challenge is helping others see it too. This session is for optimization advocates who want to build broader support for optimization within their organizations. We'll explore the practical challenges of earning buy-in, from how optimization fits in the AI landscape, connecting projects to business strategy, and demonstrating ROI.

TECHNICAL USE CASE TRACK

01:00PM–01:30PM · Joshua 5&6

Chewy: Operationalizing Batch Optimization at Chewy*Aakash Bhatt, Sr. Research Scientist (Chewy, Inc.)*

High-volume fulfillment centers must balance picking productivity with on-time shipping as backlog, capacity, and order urgency change. At Chewy, this challenge arises in person-to-goods batch picking, where team members travel through aisles to collect items for multiple outbound containers on a single cart tour.

We developed a production optimization system that jointly selects pick locations and groups containers into tours. Real-time capacity estimates and container-level slack – the estimated time buffer before its ship-by deadline, accounting for remaining processing time – inform which work can wait and which needs priority. Priority-aware clustering divides the backlog into tractable subproblems. Each cluster is then formulated as an MILP problem solved with Gurobi to balance urgency, estimated travel, and cart utilization while respecting inventory and operational constraints.

This session will explore the modeling choices, testing strategy, and operational safeguards behind deploying and running batch optimization at scale in Chewy's fulfillment centers.

BUSINESS USE CASE TRACK

01:00PM–01:30PM · Joshua 9&10

The Hershey Company - Turning Sales Planning into an Optimization Problem: Building a Scalable Scheduling and Routing System*Foad Iravani, Lead Data Scientist (The Hershey Company)*

Field sales planning requires balancing customer coverage, workload equity, travel efficiency, and a variety of operational constraints. As planning complexity grows, manual processes become increasingly difficult to scale.

This presentation describes the development of an optimization-based decision support system for Territory Sales Lead (TSL) planning. The solution schedules store visits across a multi-week horizon while satisfying visit-frequency requirements, workload targets, and geographic constraints. To achieve practical solve times, we adopted a decomposition approach that separates scheduling from routing, combining mixed-integer optimization with road-network travel data.

Built with Gurobi and deployed through Databricks, the system enables planners to generate balanced, actionable schedules and routes in minutes. The presentation will highlight the business problem, key modeling decisions, deployment architecture, and lessons learned in bringing an optimization solution from concept to production.

BUSINESS USE CASE TRACK

01:30PM–02:00PM · Joshua 9&10

GOL Airlines: From Planning to Operations - Mathematical Optimization at GOL Airlines

Felipe Higa, Data Science Manager (GOL Airlines); Daniel Augusto Cortez, Director of Data Analytics (GOL Airlines)

Airline operations require decisions involving multiple constraints, resources, and operational dependencies. At GOL Airlines, Mathematical Optimization has been applied to support some of these decisions at different stages of the operation.

In this presentation, we will share three applications developed at GOL: Pathfinder, which supports network planning within the three-day window before operations; Sentry, which supports network decisions on the day of operations; and Upkeep, which organizes overnight aircraft maintenance tasks.

We will present the business problems behind these applications, how they were translated into optimization models, how the solutions are incorporated into operational processes, and the main lessons learned from their implementation and adoption.

TECHNICAL USE CASE TRACK

01:30PM–02:00PM

JPMorganChase Research: A Practical Path Toward Usefulness of Quantum Computers in Financial Optimization

Atithi Acharya, Vice President, Applied Research (JPMorganChase)

Financial optimization is often cited as a promising application area for quantum computing, but practical usefulness requires a clear definition of the problem, the data, and the benchmark. Realistic financial decision problems involve multiple objectives, noisy high-dimensional inputs, and business constraints that can substantially change both the structure and difficulty of the optimization task. We will discuss this through the lens of multi-objective optimization, including how hierarchical and blended formulations arise naturally in financial decision-making.

We then discuss what a path toward quantum usefulness in financial optimization may require: realistic problem formulation and benchmarking against mature classical solvers such as Gurobi. We will also highlight one possible quantum sampling approach, where Fourier-based encodings and linear-combination-of-unitaries techniques can help represent constraints while reducing the need for all-to-all connectivity. This may provide a more practical way to use current quantum hardware for generating high-quality feasible solutions in constrained optimization settings.

The practical bar is clear: quantum methods must demonstrate value against realistic classical difficulty, not only simplified or artificially hard examples. This talk will focus on the modeling, benchmarking, and algorithmic considerations needed to assess whether quantum computing can become useful for financial optimization in practice.

Coffee Break

02:00PM–02:15PM

BUSINESS USE CASE TRACK

02:15PM–02:45PM · Joshua 9&10

Banco de Crédito del Perú (BCP): Five Million Offers, One Conversation at a Time: Chaining Optimization Models at Peru's Largest Bank

Mario Yupanqui, Senior Data Scientist (BCP)

Peru's largest bank approves five million credit offers every month. Its advisors can act on a fraction of them. The offer is fixed. What the bank decides is who hears about it, and through which channel.

Solved as one problem, that decision is intractable. BCP broke it into a chain of Gurobi models: five million binary variables assigning leads to channels, solved to proven optimality in thirty minutes, replacing a two-day manual allocation. A second model matches customers to branches under capacity, distance and target constraints.

Measured against a randomized control: 10.5% more margin per lead, median customer-to-branch distance cut by more than half, and branches hitting their targets up from 58% to 91%.

Mario Yupanqui will cover the modeling decisions that made it work and the one step in the chain that still runs on business rules.

TECHNICAL USE CASE TRACK

02:15PM–02:45PM · Joshua 5&6

Southwest Power Pool: Powering Decisions: Large-Scale Optimization Challenges in the SPP Electricity Market

Daniel Harless, Lead Engineer, Market Development (Southwest Power Pool)

In the energy sector, optimization is the engine that transforms massive operational data into defensible, cost-saving decisions. Managing the Southwest Power Pool (SPP) footprint requires balancing high renewable penetration, thousands of competing resource offers, and physical system limitations with real-time consumer demand. This session highlights how advanced mathematical solvers co-optimize energy and operating reserves under increasingly complex constraints and tight operational timelines. We will examine how mathematical optimization reduces wholesale power costs, mitigates risk amid resource uncertainty, and adapts to changing grid footprints. Attendees will walk away with a practical understanding of how large-scale mixed-integer programming (MIP) models bridge the gap between theoretical algorithms and mission-critical grid reliability.

BUSINESS USE CASE TRACK

02:45PM–03:15PM · Joshua 9&10

Wingstop - Smart Kitchen: How Wingstop is partnering with Gurobi to improve Speed of Service while Maintaining Best in Class COGS

Ben Newcome, Director of Applied AI and Data Science (Wingstop)

Today, each Wingstop restaurant receives a daily 15-minute demand forecast, prompting team members to proactively cook bone-in and boneless wings right before consumers order them. Restaurants on this new Smart Kitchen platform have seen a nearly 66% reduction in speed of service while maintaining best-in-class COGS thanks to our optimized demand forecast guidance.

TECHNICAL USE CASE TRACK

02:45PM–03:15PM · Joshua 5&6

Micron: Optimization in Semiconductor Manufacturing

John Bean, Operations Improvement Manager (Micron)

The decision science demands for product / equipment planning and scheduling systems in semiconductor manufacturing require advanced OR systems, including mathematical constructs and approaches. This presentation will review those complexities and some of the innovations we're using to manage solve time and modeling complexity.

Micron has recently converted some of its OR business problems to Gurobi and we have plans to convert more in the future. Our future vision calls for increased integration of AI capabilities surrounding sound mathematical models.

Micron is the 2025 recipient of the INFORMS prize for effective integration of advanced analytics and operations research/management sciences (OR/MS) in an organization.

Coffee Break & Partner Exhibition · Primrose Ballroom

03:15PM–03:30PM

GENERAL SESSION

03:30PM–04:00PM · Primrose Ballroom

Customer Keynote - Microsoft Cloud Supply Chain: Democratizing Hyperscale Optimization for Cloud Fulfillment - 2026 Edelman Award Winner

Kayla Kummerlowe, Senior Data Scientist (Microsoft); Ishai Menache, Partner Research Manager (Microsoft Research); Konstantina Mellou, Principal Researcher (Microsoft)

Microsoft transformed its cloud supply chain through the Intelligent Fulfillment Service (IFS), a production system that integrates machine learning, mathematical optimization, and generative AI to coordinate hyperscale fulfillment decisions across cloud demand, server supply, and data center capacity. IFS reduces end-to-end cycle times by more than 50% and delivers hundreds of millions of dollars in annual savings, while mitigating tariff exposure through cost-aware decision making.

Central to IFS is an LLM-powered assistant based on the OptiGuide framework, enabling planners to interact with the optimization system using natural language. It provides real-time explanations and scenario analysis, building trust in the underlying algorithms, compressing decision cycles from days to minutes, and reducing fulfillment team workload by 23%.

Recently honored with the 2026 INFORMS Franz Edelman Award, Microsoft's work has been featured in Harvard Business Review and Gartner.

GENERAL SESSION

04:00PM–05:00PM · Primrose Ballroom

Emerging Technologies Update & Panel

Dr. Oliver Bastert, CTO (Gurobi Optimization); Dr. Ed Klotz, Senior Mathematical Optimization Specialist (Gurobi Optimization); Dr. Robert Luce, Senior Director of Optimization R&D (Gurobi Optimization)

Since the 2025 Gurobi Summit, Graphical Processor Units (GPUs), Large Language Models (such as ChatGPT) and Quantum Computing have all made significant progress.

This talk will resemble a similar topic at the 2025 Summit in the sense that it will discuss all 3 technologies. However, the content will differ significantly because of the substantial progress during the last year, particularly regarding their influence on mathematical programming. The talk will consist of 4 segments of roughly 15 minutes each, with the first 3 devoted to each technology. We will provide an update regarding how Gurobi makes use of GPUs and LLMs. Regarding Quantum Computing, we will consider some early efforts to harness the potential power of quantum computers in mathematical programming algorithms. We will then turn to Large Language Models (LLMs) and consider how they can be used with Gurobi to facilitate comprehensive model development and explainability. Both are key components in building trust in the solutions resulting from the optimization. Gurobi's new Intelligence Hub provides a portal to make use of these agentic tools.

The final quarter of the presentation will consist of a panel of the 3 speakers taking questions from the audience.

DAY ONE · TUESDAY, SEPTEMBER 22, 2026 · CONTINUED

Day One Wrap Up · Primrose Ballroom	05:00PM–05:15PM
Break	05:15PM–06:00PM
Networking Reception · Ironwood Terrace	06:00PM–07:00PM
Dinner · Ironwood	07:00PM–09:00PM

Day Two · Wednesday, September 23, 2026

Coffee and light refreshments · Primrose Ballroom

07:30AM–08:30AM

GENERAL SESSION

08:30AM–09:00AM · Primrose Ballroom

Keynote: Delta Air Lines - Aircraft Routing Optimization: How Delta Air Lines Routes 1,000 Aircraft to Maintenance Using Optimization

Yaarit Cohen, Senior Operations Research Scientist (Delta Air Lines)

Delta Air Lines operates a large and complex network that requires thousands of interconnected planning decisions every day. One of those decisions is how to route aircraft through the flight schedule while maintaining aircraft continuity, satisfying operational constraints, and ensuring required maintenance opportunities.

This presentation focuses on Delta's Aircraft Routing Optimizer (ARO), a decision-support tool developed to improve the aircraft routing process. ARO helps planners evaluate a much larger number of routing alternatives while incorporating operational and maintenance requirements that are difficult to assess manually at scale.

The presentation will highlight the aircraft routing problem at Delta, the challenges of the previous manual planning process, and how mathematical optimization is used to support planners in a complex operational environment. It will also discuss the value of combining optimization with planner expertise to create a practical solution that helps Delta explore more alternatives, make better decisions, and respond faster.

GENERAL SESSION

09:00AM–09:30AM · Primrose Ballroom

AI and Optimization: The Next Frontier of Decision-Making?

Dr. Pascal Hentenryck, Head of AI Innovation Lab (Gurobi Optimization)

AI is transforming almost every segment of society, and its impact will continue to amplify over the next decade, fundamentally transforming education, science, engineering, business, art, sports, and medicine. Simultaneously, we are witnessing the convergence of symbolic reasoning, machine learning, search, and foundational models into novel neuro-symbolic and agentic architectures, expanding the frontiers of what AI can achieve when learning and exploration takes place at massive scale. This presentation starts by reviewing the state of AI and this convergence of ideas. It then argues that the fusion of AI and Optimization will transform decision-making at massive scale. This marriage will democratize access to optimization, transform the planning and control rooms of the future, and bring into the realm of possibility decision-making at massive scale. The presentation will emphasize that the critical role of reliability, trust, and explanations in its transformation, the ubiquity of optimization, and the incredible opportunities in front of us.

Walk to Technical Training Sessions

09:30AM–09:45AM

BEGINNER'S TECHNICAL TRAINING TRACK

09:45AM–10:45AM · Joshua 9&10

Introduction to Mathematical Optimization and Modeling with gurobipy*Juan Antonio Orozco, Senior Optimization Engineer (Gurobi Optimization)*

Kick off your optimization journey by exploring the core concepts of mathematical optimization, how it translates into real-world decision-making, and the value it can bring. You'll see to formulate building blocks of optimization problems and implement them in Python using the gurobipy package.

ADVANCED TECHNICAL TRAINING TRACK

09:45AM–10:45AM · Joshua 5&6

Models you can trust: The Impact of Numerics and Scaling*Zed Dean, Senior Technical Account Manager (Gurobi Optimization)*

Numerically sound, well-scaled models produce reliable, reproducible results - poor numerics undermine trust. We will see that also better performance, both regarding run time and solution quality, may be obtained by deliberate scaling choices during the model formulation process. After discussing suitable background information, this session will consider scaling strategies for model creation, including proper choice of units of measurement and alternate formulations to preempt numerical problems. Furthermore, a new open-source scaling package will be presented to assist you hands-on in identifying and resolving certain numerical issues.

THOUGHT LEADERSHIP

10:15AM–10:45AM · Joshua 7&8

Insight Kitchen - Pairing Optimization and AI Agents for Operational Results*Russel Halper, Co-Founder & CEO (Insight Kitchen)*

Mathematical optimization has been the gold standard for many critical operational decisions: how to deliver, what to produce, where to position inventory, and countless other challenges. These decisions often involve numerous interdependent variables, complex constraints, and quantifiable solution quality. No other technology, including today's most capable AI agents, can make these trade-offs with the same rigor as optimization. But agents bring something optimization has often lacked: the ability to work with messy inputs, move fast on the surrounding workload, and speak the language of the business. This session is about how the two work together, and why that combination, not either technology alone, is where leading organizations are seeing real returns. We will offer business leaders a practical framework for putting optimization at the center of an agentic operating model. Agents strengthen every stage of the optimization lifecycle: validating data quality before the solve (bad inputs quietly wreck good models), generating and pruning scenarios around the solve, and after the solve, flagging exceptions and translating results into plain language so anyone in the business can act on them. The result is faster builds, broader adoption, and optimization value reaching far beyond the analytics team.

Coffee Break

10:45AM–11:00AM

BEGINNER'S TECHNICAL TRAINING TRACK

11:00AM–12:00PM · Joshua 9&10

Hands-On Modeling with gurobipy

Abby Freeman, Technical Account Manager (Gurobi Optimization)

There's no better way to learn than by doing. Here we get hands-on with practical modeling techniques through guided, interactive exercises. We'll explore how to interpret solutions and examine explainability in optimization modeling.

ADVANCED TECHNICAL TRAINING TRACK

11:00AM–12:00PM · Joshua 5&6

MINLP Modeling in Practice

Dr. Rodrigo Fuentes, Senior Technical Account Manager (Gurobi Optimization)

MINLP extends the well-established MILP framework to handle nonlinearities, covering both convex and non-convex scenarios. This session focuses on the practitioner's perspective: implementation details that can make a realistic MINLP problem easier to solve. We will cover the practical side: variable bounds, starting points, numerics, scaling, and log interpretation, among other things. We will also look at how different but mathematically equivalent formulations of the same nonlinear problem can improve solver performance. We will illustrate key concepts through practical examples.

We will also include a sneak peek at new Python API features coming in Gurobi 14 — including a cleaner, more expressive way to define nonlinear objectives and constraints.

THOUGHT LEADERSHIP

11:00AM–11:30AM · Joshua 7&8

Aimpoint Digital - From Disruption Signal to Optimized Decision: Agentic Scenario Building with Gurobi

Alison Cozad, Principal Decision Scientist (Aimpoint Digital)

Supply chain planners are being offered AI that promises to answer any question. The harder problem is turning a real disruption into a question the model can answer, quickly enough for the answer to still matter.

ASCI (Aimpoint Digital Supply Chain Intelligence) grew from years working alongside supply chain leaders through disruptions, planning cycles, and optimization projects. Planners need to move quickly, test assumptions at once, see what changed, and understand why the plan changed, without becoming optimization experts themselves. ASCI is designed to work where the planning data already lives.

In ASCI, AI and Gurobi are complements. The language model shortens the path from a planner's description of a problem to a scenario ready to run, drafting scenario data as SQL that the planner can review. Gurobi solves the mixed-integer program. Each makes the other more useful.

We'll show a planner describing a disruption in plain language and ASCI turning it into a runnable scenario. Every plan stays tied to the scenario that produced it, so anyone can re-run it, change an assumption, and compare. We'll demonstrate the Disruption Agent, which watches external signals and suggests scenarios worth testing before a planner thinks to ask. ASCI's branching approach makes it possible to explore versions of a scenario without losing track of what changed.

We'll also share what surprised us, including where natural language helped less than expected and where it helped far more. Attendees will leave with a practical way to think about where AI belongs in an optimization workflow, where it does not, and how the two can work together.

THOUGHT LEADERSHIP

11:30AM–12:00PM · Joshua 7&8

Frontline - Excel and Power BI: Use Gurobi Where Your Data – and Your Stakeholders – Live*Dan Fylstra, President (Frontline)*

Every optimization project must deal with two realities: Your model needs selected, updated data to solve, and your model's results must be available to the right stakeholders at the right time. One more, often overlooked factor: Your model and its results must be trusted by those stakeholders. This session shows how you can address these key issues in the common case when the data and/or the stakeholders “live in” Microsoft Excel and/or Power BI.

Frontline Systems (Solver.com), the presenter, is the original creator of the Solver built-in to Microsoft Excel, and the earliest-ever Gurobi Partner. Frontline's product Analytic Solver® is the leading Excel-centric tool for optimization, and its new product RASON® Desktop is the leading (almost the only) Power BI-centric tool for optimization. Frontline makes it not just possible, but easy to use your existing Gurobi Solver in Python, Excel, and Power BI. Even better, you can move models from Excel to Power BI and/or to your custom application, without re-writing them.

AI is very much part of the story: You'll see how CoPilot and Frontline's AI Agent can take you from a business need or problem description to a working model, in Excel or Power BI, in just minutes. And trust in your model by stakeholders is one more key part of the story: Transparency is the route to confidence and trust, and for Excel-literate (almost everyone) and Power BI-conversant stakeholders, it helps immensely when your model and its results are visible – transparent – in Excel and/or Power BI.

Lunch & Networking · South Primrose Veranda

12:00PM–01:00PM

ADVANCED TECHNICAL TRAINING TRACK

01:00PM–02:00PM · Joshua 5&6

TuneTok: A Live Tuning Demo

Jennifer Locke, Manager of Technical Account Management-Americas (Gurobi Optimization); Dan Steffy, Senior Optimization Engineer (Gurobi Optimization); Dr. Ed Klotz, Senior Mathematical Optimization Specialist (Gurobi Optimization); Dr. Rodrigo Fuentes, Senior Technical Account Manager (Gurobi Optimization)

This presentation offers a unique opportunity to witness live optimization model tuning by Gurobi Experts. We will demonstrate real-time parameter adjustments, showcasing the step-by-step process and strategies employed to enhance performance. Attendees will gain valuable insights into identifying key performance factors and mastering parameter tuning techniques for optimized results. If you have a model you'd like to see tuned during the session, please reach out to us at support@gurobi.com for instructions to send us your model. The deadline for contributions is August 15th.

BEGINNER'S TECHNICAL TRAINING TRACK

01:00PM–01:30PM · Joshua 9&10

Introduction to Nonlinear Optimization*Nicholas Parham, Technical Account Manager (Gurobi Optimization)*

Linear programming is a foundational approach to mathematical optimization that has many useful applications. However, it may not be expressive enough to model some real-world systems. In this session, we present the larger nonlinear programming toolkit as a way to model and solve more complex relationships. Topics will include nonlinear programming concepts, algorithms, trade-offs, and examples.

THOUGHT LEADERSHIP

01:00PM–01:30PM · Joshua 7&8

Use Case: Ormae

Abstract to be announced.

THOUGHT LEADERSHIP

01:30PM–02:00PM · Joshua 7&8

BIP - How Agents Modernized Our Optimization Lifecycle [Real-World Case: Railway Crew Scheduling]

Elizio Rezende de Almeida, Data Science Innovation Lead (BIP); Bráulio Antônio Mesquita Souza, Operational Research Principal Lead (BIP)

The optimization landscape is changing, and agents are reshaping how optimization solutions are built and used.

How we use agents in optimization

Agents are reshaping the optimization lifecycle: building trust in the data, accelerating the first working model, and helping the business interrogate and understand the resulting plan. We use agents at these three points: validating digital-twin inputs, accelerating the path from mathematical specification to an initial formulation, and turning solver output into new business questions and comparable scenarios. The MIP remains the decision engine. Agents are how we reach it faster and use it with more confidence.

The real-world solution

Our proving ground is railway crew scheduling: assigning and sequencing train drivers across a live network, rebuilding a 24-hour plan every hour while balancing idle time, overtime, relocation costs, and labor rules. The model runs on Gurobi, ingests data from operational systems, and publishes the optimized plan. It is designed for continuous operations to support real-world disruptions, not a one-off study. In this case, the agent layer is not a demo alongside the optimizer; it is what makes a production-grade crew plan possible at the pace required by railway operations.

BEGINNER'S TECHNICAL TRAINING TRACK

01:30PM–03:00PM · Joshua 9&10

An AI-Assisted Workflow for Optimization Modeling with Gurobi Intelligence Hub*Summer Purschke, Technical Account Manager (Gurobi Optimization)*

In this session, we'll follow the evolution of an optimization model using the agents within the Gurobi Intelligence Hub, from an initial problem description through formulation, validation, and real-world troubleshooting. The Modeling Agent serves as the foundation of our discussion, translating requirements into a mathematical model, generating solver-ready code, creating validation tests, and documenting key modeling decisions. We'll demonstrate how Gurobot and Explainer fit naturally into the development workflow by assisting with setup, troubleshooting, and model behavior explainability. Together, we'll gain a strong understanding of how the agents within the Gurobi Intelligence Hub provide AI-assisted support throughout the optimization modeling workflow.

ADVANCED TECHNICAL TRAINING TRACK

02:00PM–03:00PM · Joshua 5&6

Explainability with Gurobi AI Tools*Caroline Weinberg, Manager of Optimization Support (Gurobi Optimization); Yuriy Zinchenko, Senior Optimization Engineer (Gurobi Optimization)*

Explainability is the foundation of trusted decisions. When users understand why a model recommends certain actions, they can confidently act on those insights. This session showcases the Gurobi Intelligence Hub, our home for GenAI-powered optimization tools, and demonstrates how its tools can be used to enhance explainability for mathematical optimization. We will highlight real-world use cases and key lessons learned from deploying our Gurobot, Explainer, and Modeler agents. Attendees will also get a preview of upcoming developments and learn how to access our agents programmatically.

THOUGHT LEADERSHIP

02:00PM–02:30PM · Joshua 7&8

AMPL: Powering the Grid - Building Scalable, Transparent Energy Optimization Workflows

This talk presents real-world case studies from energy systems worldwide, including unit commitment, price forecasting for the Chilean national grid, and battery storage optimization. Showing how AMPL powers scalable, mission-critical optimization workflows.

Moving energy optimization models from initial prototypes to complex operational environments often exposes the limits of traditional frameworks: slow setups, maintenance overhead, and opaque code.

AMPL simplifies this transition using an intuitive, close-to-math syntax that preserves transparency while delivering high-performance modeling across linear, nonlinear, and GPU-accelerated solvers.

Coffee & Pretzel Break · Primrose Ballroom

03:00PM–03:15PM

GENERAL SESSION

03:15PM–04:15PM · Primrose Ballroom

Panel: Selling Optimization Internally: Turning Better Decisions into Business Buy-In

Building a powerful optimization model is only half the battle. The real challenge is gaining stakeholder support, aligning with business priorities, and driving adoption across the organization. In this panel, industry leaders share practical strategies for communicating the value of optimization, overcoming resistance to change, and securing executive sponsorship. Learn how successful teams translate technical results into business outcomes that earn trust, influence decisions, and turn optimization initiatives into lasting impact.

Closing Remarks · Primrose Ballroom

04:15PM–04:20PM