



2024 TRACK SCHEDULE

65+ Featured
Speakers

85+ Innovative
Sessions

March 21st &
March 22nd, 2024

UWM Sports Complex,
Pontiac, MI

www.mitechcon.org



2024 Track Schedule

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FROM THE PRESIDENT OF THE MICHIGAN TECHNOLOGY CONFERENCE

Friends and Innovators,

Welcome to the Michigan Technology Conference! As your Board President, I'm excited to welcome you and our incredible lineup of speakers. With over 85 talks by more than 65 experts, we're joined by over 40 of the most innovative companies, making this a landmark event for Michigan's tech community.

Our schedule is packed with knowledge and insights, designed to inspire and challenge you. Through the Whova app, you'll have the freedom to build your experience, moving freely between tracks to catch the sessions that most interest you.

This gathering is a testament to the power of sharing expertise and fostering connections. It's a platform not just for learning, but for contributing to the broader conversation about technology's role in our future.

Thank you for exploring with us. Let's dive into these two days with open minds and the spirit of collaboration, ready to discover the possibilities that lie ahead.

Best,

Michael Riley

President, The Michigan Technology Conference



Changes to the schedule may occur. Go to www.mitechcon.org or download the Whova app to see the most up-to-date schedule.

SCHEDULE OVERVIEW

Thursday March 21st



Friday March 22nd

Check-In Opens: BREAKFAST ON FIELD 2

7:30 a

Check-In Opens: BREAKFAST ON FIELD 2

Keynote: Tim O'Reilly: UWM AUDITORIUM

8:30 a

Keynote: David Giard: UWM AUDITORIUM

Session Block 1: VARIOUS ROOMS

9:45 a

Session Block 6: VARIOUS ROOMS

Session Block 2: VARIOUS ROOMS

11:00 a

Session Block 7: VARIOUS ROOMS

Break: LUNCH ON FIELD 2

Noon

Break: LUNCH ON FIELD 2

Session Block 3: VARIOUS ROOMS

1:15 p

Session Block 8: VARIOUS ROOMS

Session Block 4: VARIOUS ROOMS

2:30 p

Session Block 9: VARIOUS ROOMS

Session Block 5: VARIOUS ROOMS

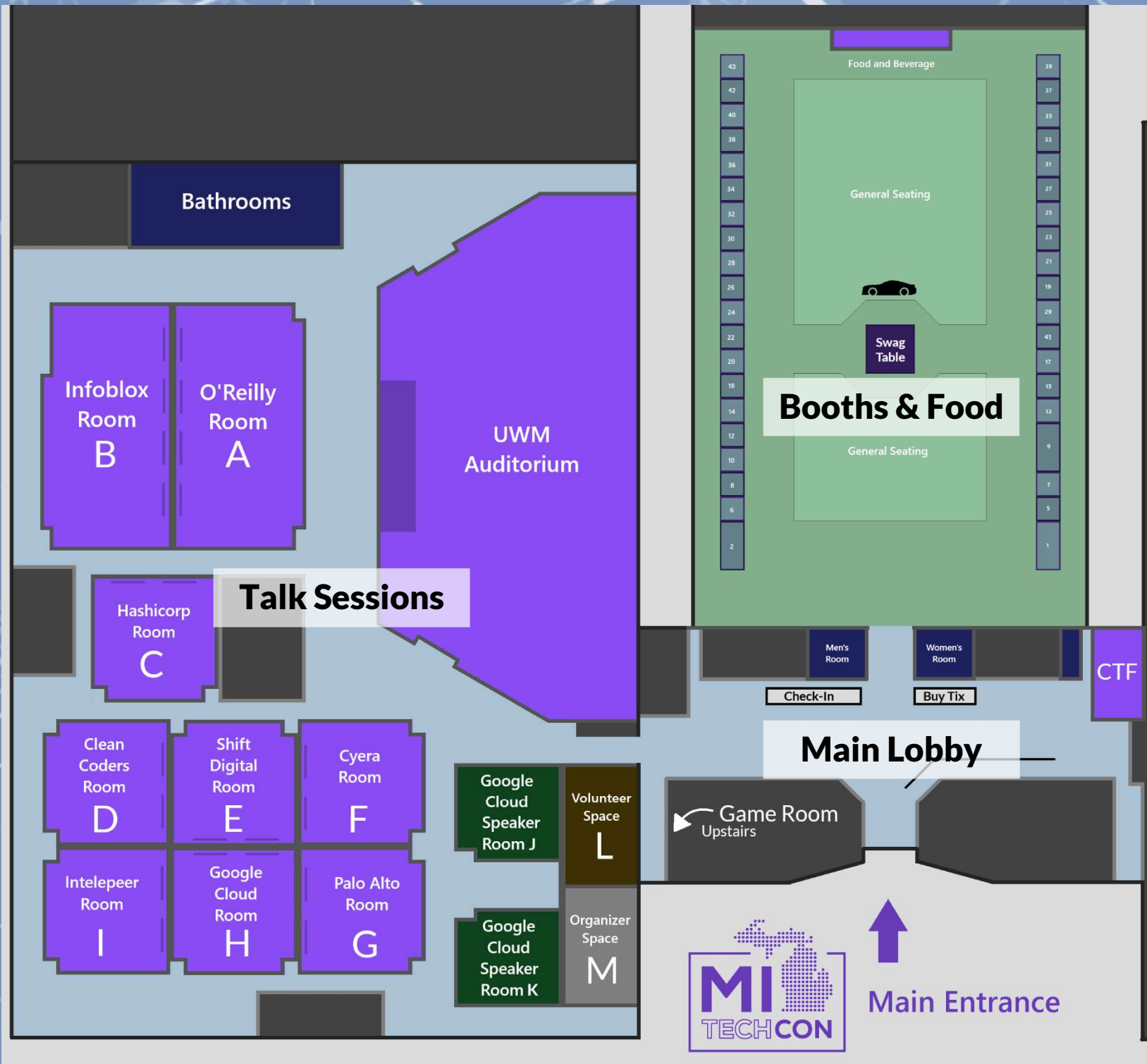
3:45 p

Session Block 10: VARIOUS ROOMS

After Party: DJ ON FIELD 2

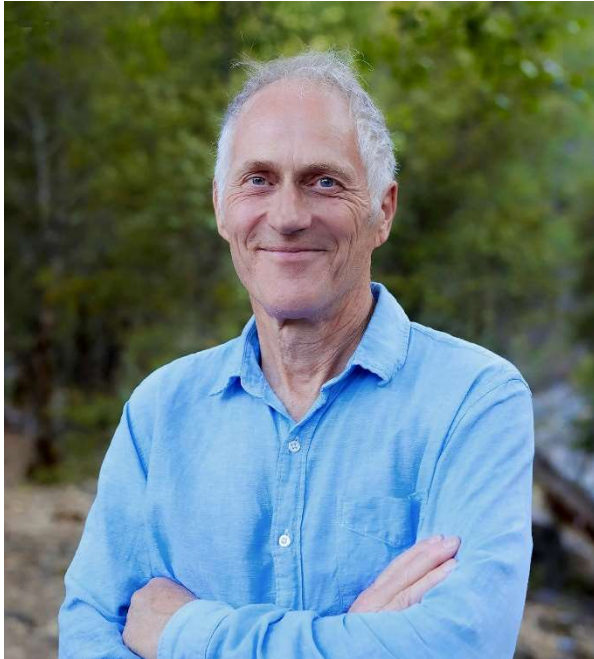
5:00 p

Closing: Garlin Gilchrist II: UWM AUDITORIUM



KEYNOTE: TIM O'REILLY

Founder and CEO of O'Reilly Media



Sustaining Success: Tech Platforms and the Value-Creation Imperative

8:30 AM Thursday March 21st | UWM Auditorium

We will explore the critical importance of tech platforms in supporting their ecosystems and the essential practice of creating more value than they capture. This principle is foundational for platforms that aim to maintain relevance and thrive over the long term. Our discussion will spotlight the current trajectories of industry leaders like Google and Amazon, which are perceived to be moving away from these crucial practices, potentially undermining their future sustainability and success. Furthermore, we will critique the approach taken by emerging entities such as OpenAI, suggesting that there has been insufficient consideration of these principles from their inception.

About Tim:

Tim O'Reilly has a history of convening conversations that reshape the computer industry. He's played a key role in framing and evangelizing terms such as "open source software" "web 2.0" "the Maker movement" and "government as a platform". He is the founder, CEO, and Chairman of O'Reilly Media, and a partner at early stage venture firm O'Reilly AlphaTech Ventures (OATV). He is also on the boards of Code for America, PeerJ, Civis Analytics, and PopVox. His book, WTF: What's the Future and Why It's Up to Us, explores what technology advances teach us about the future economy and government as its "platform." He is a Visiting Professor of Practice at University College London's Institute for Innovation and Public Purpose, where he is researching a new approach to regulating big technology platforms by limiting their ability to extract economic rents.

KEYNOTE: DAVID GIARD

Microsoft Cloud Solution Architect

You and Your Technical Community

8:30 AM Friday March 22nd | UWM Auditorium

IT Professionals often work in isolation and ignore the large number of other people doing similar work. But there are benefits to connecting with others in your community.

In today's presentation, I will share with you how others have helped advance my career and how I connected with them. I'll show you how you can enhance your career by drawing on the experiences of those around you. And how to have fun doing it.

About David:

David Giard is a former accountant and a former biochemist, who has been developing solutions using Microsoft technologies for over three decades. Currently, David helps companies solve hard technical problems in his role as a Microsoft Cloud Solution Architect. David has been very active in the developer community, speaking at numerous major conferences, code camps, and user groups around the world; helping to lead user groups; and helping to organize conferences and other geek events. He is the host and producer of the mildly popular online TV shows "Technology and Friends" and "GCast". He is the co-author of the Wrox book Real World .NET, C#, and Silverlight. You can read his latest thoughts at davidgiard.com. His hobbies include video, photography, sports, and embarrassing his sons.



CLOSING REMARKS: HALEY STEVENS

Congresswoman for the 11th District of Michigan



Closing Remarks

5:00 PM Friday March 22nd | UWM Auditorium

Haley will deliver the closing remarks.

About Haley:

Congresswoman Haley Stevens was born in Rochester Hills, Michigan, and graduated from Seaholm High School in Birmingham. She earned a master's degree in social policy and philosophy and a bachelor's in political science and philosophy from American University.

Before being elected to Congress, Congresswoman Stevens served as the Chief of Staff to the U.S. Auto Rescue Task Force, the federal initiative responsible for saving General Motors, Chrysler, and 200,000 Michigan Jobs. She also played a crucial role in setting up the Office of Recovery for Automotive Communities and Workers and the White House Office of Manufacturing Policy. After serving in the Obama Administration, Congresswoman Stevens worked in a manufacturing research lab focused on the future of work in the digital age.

Congresswoman Haley Stevens sits on the House Committees on Education and the Workforce and Science, Space & Technology, where she serves as the Ranking Member of the Research & Technology Subcommittee.

Congresswoman Stevens resides in Birmingham, Michigan, and is frequently seen walking through the many communities of her beloved Oakland County.

CLOSING REMARKS: GARLIN GILCHRIST II

Lieutenant Governor of Michigan

Closing Remarks

5:00 PM Friday March 22nd | UWM Auditorium

Garlin will deliver the closing remarks.

About Garlin:

Lieutenant Governor Garlin Gilchrist has dedicated his career to solving problems. An engineer by training, he uses thoughtful and fact-based practices to solve real problems and make government work better for Michigan families.

As part of the Whitmer Administration, Lt. Governor Gilchrist has focused on helping Michiganders in communities across our state realize their full economic and political potential. From co-chairing the Michigan Joint Task Force on Jail and Pretrial Incarceration, to helming the Michigan COVID-19 Task Force on Racial Disparities, to leading efforts to connect over 23,000 unserved locations in Michigan to affordable high-speed internet, Lt. Governor Gilchrist is committed to building a more just, equitable, prosperous, and connected Michigan where everyone can thrive.

Lt. Governor Gilchrist and his wife, Ellen, reside in Detroit where they are raising their twins, Emily and Garlin III, and daughter, Ruby.





ARTIFICIAL INTELLIGENCE & DATA



ARTIFICIAL INTELLIGENCE & DATA

9:45 AM | Thursday March 21st

Google Cloud Room | Boosting Productivity with AI: Tips and Techniques for Software Developers

GAINES KERGOSIEN

As Artificial Intelligence (AI) becomes more prevalent, software developers are looking for ways to harness its power to increase productivity and accomplish more in less time. This session will provide an overview of the latest AI tools and technologies available to software developers and discuss how they can automate repetitive tasks and improve workflow. Attendees will learn about various AI-based approaches such as machine learning, natural language processing, and computer vision, and how they can be applied to software development. We will also showcase real-world examples and provide hands-on demonstrations of AI-based tools and techniques to help developers save time and increase their productivity.

Intelepeer Room | Unleashing Potential: Investigating How Organizations Utilize Data to Propel Business Achievements

JOSH LINDSTROM

This session will embark on a comprehensive exploration of how organizations harness the power of data-driven innovation and strategic methodologies to attain concrete business objectives in real-time. In this session, we'll present a structured framework spotlighting diverse organizations, such as the Detroit Lions, that have fearlessly adopted data to lead revolutionary shifts within their sectors, ultimately driving business outcomes, including advancements in AI.



Palo Alto Room | Creating GenAI Apps in Java with SD4J (Stable Diffusion for Java) and the ONNX Runtime

JUAREZ JUNIOR

Stable diffusion refers to a process in the context of generative models, particularly in generative adversarial networks (GANs). SD4J (Stable Diffusion for Java) is a new open-source project by Oracle Labs, which is Oracle's Research and Development arm. This talk comprises an explanation of how to create a GenAI application by combining SD4J and the ONNX Runtime from Java, along with best practices and performance tips when building your image-generation ML pipelines.

ARTIFICIAL INTELLIGENCE & DATA

11:00 AM | Thursday March 21st

Infoblox Room | Come on Barbie, Let's Go Party: Using AI for Music Mixing

ZIV LEVY

As a DJ, I use many techniques to mix and create new sounds that get peoples' hands in the air. In this talk I'll describe AI algorithms based on Neural Networks which have the ability to break down music into elements. I'll cover how our brain differentiate between dozens of different sound signals when we listen to music. Can we instruct AI to do so?

The cool part: live DJing on stage using AI algorithms.



1:15 PM | Thursday March 21st

Infoblox Room | Azure OpenAI in Action

BRIAN MCKEIVER

Azure's OpenAI service allows developers to apply large language models and generative AI to a variety of use cases. It represents a transformative approach to AI development. By leveraging Microsoft's powerful cloud infrastructure, it demystifies complex AI processes. Most importantly it allows you to bring your own data to the party. Join the session to see how this service, along with tools like Azure OpenAI Studio and Azure ML Studio, makes AI development accessible and manageable for us all. See how it is a platform designed to bridge the gap between theoretical AI and practical implementation. Leave knowing how to ground AI with your own data and add it into your own applications.



2:30 PM | Thursday March 21st

Intelepeer Room | Networking for AI

CHRIS KANE

We're all reading stories of \$BNs of spend for GPUs. The question is "How do we connect all of these GPUs together?" During this session we're going to focus on Networking for AI. How are these networks getting built today, what are we expecting the technology to look like over the next 18-24 months and who does this impact. Hint; all networks large and small.

ARTIFICIAL INTELLIGENCE & DATA

2:30 PM | Thursday March 21st

Google Cloud Room | Unleashing Business Value and Innovation with Generative AI

GEOFF KRAMER

The world of AI has evolved rapidly over the past year, moving from a state of curiosity and exploration to a strategic tool for driving tangible business value. This session will demonstrate the value of AI-first business, equipping you with the insights and strategies to harness the power of generative AI to deliver efficiency and accelerate growth.

3:45 PM | Thursday March 21st

Intelepeer Room | Simplified Cross Platform DataOps

ERIC WALK, BEN HAHN

Using simple tools and standard DevOps practices to achieve the long-term dream of an operationalized data platform. We'll show how we can use dbt, GitHub, and Grafana to build a standardized approach regardless of underlying cloud data platform. The focus will be on Test Automation, Observability, and Pipeline Orchestration for our demonstration.



Eric Walk



Ben Hahn

Shift Digital Room | ChatGPT Unleashed: From Code Wizards to Silly Shenanigans!

DAVID GIARD

Discover the remarkable capabilities of ChatGPT in our engaging presentation. We explore how ChatGPT can transform software development, streamline common business tasks, and enhance writing processes. Through a plethora of examples, we demonstrate how ChatGPT can serve as a powerful assistant in code generation, debugging, and problem-solving for developers. Furthermore, we showcase its versatility in simplifying business activities such as drafting emails, generating reports, and providing efficient customer support. But that's not all! Join us as we delve into the playful and imaginative side of ChatGPT, showcasing its ability to entertain and inspire with fun and silly interactions. With its natural language processing prowess and contextual understanding, ChatGPT responds seamlessly to a wide array of inquiries and prompts. By the end of this presentation, you'll gain a comprehensive understanding of ChatGPT's potential applications across software development, business tasks, and writing, leaving you equipped to leverage this powerful tool in your own endeavors. Get ready to explore the exciting possibilities that ChatGPT brings to the table.

ARTIFICIAL INTELLIGENCE & DATA

9:45 AM | Friday March 22nd

Infoblox Room | Detroit's Mobility Past, Present, and Renais-sonic Future

TONY GEARA

In this session, I invite the audience to explore the captivating journey of Detroit's mobility evolution. We'll traverse a century, witnessing Detroit's ascent from the zenith of Internal Combustion Engine (ICE) dominance to the depths of bankruptcy. Delving into a transformative narrative of resilience, we'll see how Detroit, within a decade, emerges from adversity, triumphing over the challenges of COVID disruptions to reclaim its position at the forefront of global mobility innovation and economic competitiveness. Join us to unravel the compelling tale of Detroit's resurgence and its pivotal role in shaping the future of mobility through technology, innovation, data, and more.



Clean Coders Room | Clone yourself with Azure Custom Neural Voice

CALLUM WHYTE

Everyone has at some point wished they could clone themselves – to do the dishes, or work more efficiently. With advancements and improved accessibility of AI, this becomes more of a reality...

This session will explore how to use Azure Custom Neural Voice to create a synthesised version of our own voice for use in a range of fun and practical applications – telephony, voice overs, or even attending meetings on your behalf...!

We'll cover the basics of training and tweaking a model of our own voice, with minimal code, that can be used to turn text into natural-sounding speech.

Advancing further, we'll learn some ways to train our model with enhanced training data. As an example we'll take a larger amount of audio, such as a podcast, use widely available tools and APIs to identify the individual speakers and the words being spoken – including highly technical language – to feed into our model.

You will leave with the knowledge and inspiration to give "cloning" your voice a try!

ARTIFICIAL INTELLIGENCE & DATA

11:00 AM | Friday March 22nd

Clean Coders Room | GenAI: The Next Enterprise Revolution

ROMAN KHARKOVSKI

Roman Kharkovski and Aaron Vermeersch are two LLM engineers from Qarik, a engineering consulting company who specializes in platform engineering and GenAI. Roman and Aaron would like to co-present on how GenAI is changing the landscape of enterprise technology, business velocity, and the very definition of productivity. The talk will focus more so on technical details for building LLM's, deploying them into production environments and achieving scale. Topics of discussion will include reference architectures, best practices for tooling and frameworks, and use cases that are viable for GenAI implementations.



Andrew Katoch



BK Inbasekaran

1:15 PM | Friday March 22nd

Intelepeer Room

Embarking on MLOps Odyssey: Kickstarting the Journey

BK INBASEKARAN, ANDREW KATOCH

Step into the world of MLOps as we share different MLOps patterns and how we've leveraged this knowledge to develop bespoke strategies to fulfill our company's needs.

Google Cloud Room | Adapting AI Governance for Responsible Generative AI Adoption

BAGLEY WALK

As early adopter organizations are making headlines with new and exciting Generative AI capabilities, those weekly headlines remind us that GenAI solutions also carry additional risks. Understandably, many organizations are beginning to turn attention to governance and management practices that allow them to capture value quickly while also ensuring responsible use of powerful tools.

ARTIFICIAL INTELLIGENCE & DATA

2:30 PM | Friday March 22nd

Intelepeer Room | Embracing AI for Android App Development: The Next Revolution

SAGAR DAS

Artificial intelligence (AI) is rapidly changing the world, and the field of Android app development is no exception. AI can be used to improve the performance, user experience, and security of Android apps. In this keynote talk, I will discuss how AI is revolutionizing Android app development and how devs can start using it in their apps. By the end of this talk, attendees will be able to understand the benefits of using AI for Android app development and learn how to use Studio Bot to improve their Android development workflow.

Google Cloud Room | Responsible AI in Action

PAMMELA SAVAGE, CHRIS COULTHRUST

Learn about RAI Principles and Standards, Managing Sensitive Uses and some tools and practices around stress testing and red teaming.

3:45 PM | Friday March 22nd

Google Cloud Room | Ensuring Your AI Investment

GEOFF KRAMER

Why a Future-Proof AI Platform is Essential: In today's rapidly evolving AI landscape, it is crucial to choose an AI platform that can not only meet your current needs but also adapt to the ever-changing demands of the future. This session will delve into the key considerations for selecting a future-proof AI platform including critical factors around security, compliance, and infrastructure capabilities.

Intelepeer Room | Effective Data Visualization

DAVID GIARD

We spend much of our time collecting and analyzing data. That data is only useful if it can be displayed in a meaningful, understandable way. Yale professor Edward Tufte presented many ideas on how to effectively present data to an audience or end user. In this session, I will explain some of Tufte's most important guidelines about data visualization and how you can apply those guidelines to your own data. You will learn what to include, what to remove, and what to avoid in your charts, graphs, maps and other images that represent data.

3:45 PM | Friday March 22nd

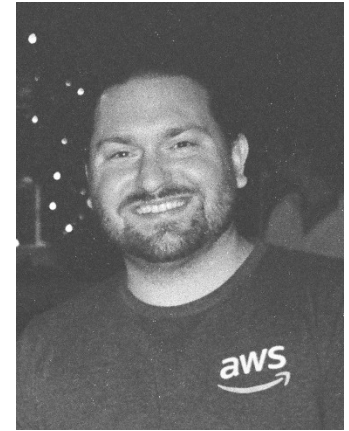
Shift Digital Room | Innovate on enterprise data with generative AI and Amazon Q for Business

JACOB SCHEATZLE, RITESH SHAH

As enterprises grapple with fast technological change, join this workshop to learn how to safely build custom generative AI applications to supercharge employee productivity using Amazon Q for Business application. You'll learn how to create a conversational generative AI application for employees or customers, powered by your own enterprise content. With Amazon Q Business application, you'll ingest proprietary data through secure connectors and define access policies so the application only responds with information users are allowed to see – and confirm the response uses only content the user has permission to access. During the session, participants will have an opportunity to see a live demo to build their own AI chatbot in under 30 minutes - no prior coding or AIML experience required.



Ritesh Shah



Jacob Scheatzle

Cyera Room | Accelerating Customer Service Automation with Generative AI

DJ MOORE

IntelePeer will present Generative AI as a tool for automating live customer service interactions and discuss the implications and benefits for enterprises.



CLOUD





9:45 AM | Thursday March 21st

Infoblox Room | Cloud Adoption - Exploring 'as a Service'

CHARLES LAKES

The cloud is exciting, but cloud adoption can be tricky. I keep hearing about Software-as-a-Service (SaaS), Platform-as-a-Service (PaaS), and Platform-as-a-Service (IaaS), but what are they? Come learn about 'as a Service' and how it could improve cloud adoption, increase ROI, and more.

11:00 AM | Thursday March 21st

Google Cloud Room | Deploying globally resilient websites

CALLUM WHYTE

Delivering maximum uptime and the fastest response to our end users all over the world is very important... So we deploy our application to powerful servers and hope for the best. But managing and visualising each component of our infrastructure, how it everything hangs together, detecting and handling failure, as well as deployments, can all be a challenge. Callum will share his experience of adding world-class resilience to globally distributed (ASP.NET) web applications. Everyone will come away with actionable steps they can implement in their organization to improve resilience and performance, regardless if they're building websites in Node or microservice systems in .NET.

2:30 PM | Thursday March 21st



Clean Coders Room | The Journey to a Multi-Cloud Strategy

MACK HENDRICKS

In this session, we will discuss the journey of adopting a multi-cloud strategy. This journey isn't easy because humans typically don't like change, but businesses need change to stay competitive. Hence, making the journey bumpy and uncomfortable. You can overcome these challenges by properly packing for the journey, which consists of using tools that act like a Swiss-army knife. We will share stories and experiences of our strategic customers and how they have used various tools to adopt a multi-cloud strategy.

3:45 PM | Thursday March 21st

Google Cloud Room | Allow Me to Introduce Low-code

CHARLES LAKES

Low-code is a WYSIWYG approach to rapid development. While Python, C#, and JavaScript are great programming languages, and there are plenty of frameworks and libraries for each of them, high-code development isn't for everyone. In this session, we'll define low-code, explore the developer deficit it helps to address, demonstrate how it increases return on investment (ROI), and review the skills you'll need to get started, without a traditional developer's background, creating apps, automations, bots, and more.

9:45 AM | Friday March 22nd

O'Reilly Room | Don't Build a Distributed Monolith: How to Avoid Doing Microservices Completely Wrong

JONATHAN "J" TOWER

As a consultant, I get to see many systems built by many different developers. Recently, I've seen an uptick in the number of systems built with a microservice architecture in mind, but those systems often include a lot of the same mistakes that keep them from working well. In this session you'll learn from my experiences and get pointers on what to avoid in your microservices implementations so that you don't accidentally build something which has all the worst aspects of a monolithic application and the worst aspects of microservices. These monsters are what I call "distributed monoliths", and I can help you avoid building one accidentally.



11:00 AM | Friday March 22nd

Hashicorp Room | The new era in Software Engineering evolution

NOAM LEVY

Welcome to the next step in your software engineering journey: the FinOps frontier. In the early 2000s, a software engineer's responsibilities typically ended at the release of a new software version. But the landscape evolved. By 2010, the dawn of cloud computing required us to adopt DevOps skills and rethink the boundaries of our roles. Today, we stand on the brink of a fresh era, an era where financial operations (FinOps) becomes an integral part of software engineering. As we embrace cloud scalability, understanding the financial implications of our design and architecture choices is more critical than ever. In this lecture, we'll delve deep into the world of FinOps. We'll explore its core principles, how it's changing the game in cloud financial management, and, most importantly, how you can embed this culture within your R&D organization.

Google Cloud Room | Site Reliability Engineering the Google way

JEFF BAIRD

SRE is what you get when you treat operations as if it's a software problem. Our mission is to protect, provide for, and progress the software and systems behind all of Google's public services — with an ever-watchful eye on their availability, latency, performance, and capacity.

1:15 PM | Friday March 22nd

Cyera Room | File New: Build a Fully-Managed and Documented API

CHAD GREEN

Azure API Management is a way to create consistent modern API gateways for existing backend services. It provides an interface for your backend services and APIs while ensuring they are secured, monitored, maintained, well-documented, and published to the cloud. In this session, we will focus on the how by creating a new Azure API Management instance, configuring API endpoints to be served by the API Management instance, setting up rate-limiting, transforming data coming in and out of the endpoints, providing a portal for developers to interact with the API, and add security and performance. You will see firsthand how to get the most out of Azure API Management to make your APIs accessible to your internal and external customers.

1:15 PM | Friday March 22nd

Palo Alto Room | Cloud Security is a Layer 8 Problem

BENJAMIN NICHOLSON

In order to successfully secure your cloud infrastructure is in important to work across multiple teams. Unfortunately teams are now more siloed than ever in cloud security. What is the best method to getting teams to collaborate and to achieve your security goals? In this presentation I will give real-life examples on successes and failures and what I've found works best in our current security climate.

2:30 PM | Friday March 22nd



Terry Flynn



Michael Lindskov



Jim Cole

O'Reilly Room | Success Through Automation

TERRY FLYNN, MICHAEL LINDSKOV, JIM COLE

During a panel Q&A session, Infoblox and Comerica will delve into Comerica's Cloud Strategy, their journey of Application Migration, and the strategic utilization of Automation for achieving remarkable success. The discussion will also spotlight the crucial role Infoblox IPAM played in realizing Comerica's vision. Additionally, future plans, strategic direction, and next steps will be key topics of conversation.



9:45 AM | Thursday March 21st

Clean Coders Room | Minimal vs. functional: “Clean” code as a practical – rather than aesthetic – virtue

KAITLYN CONCILIO

You cannot tell at a glance whether code is “clean” or not, yet most developers seem to attribute more value to code that’s pleasing to look at rather than code that is consistent, readable and understandable. We’ll discuss some of the shortcomings with some commonly accepted indicators of “clean” code, as well as some principles to follow for truly cleaner (and maintainable!) codebases, regardless of language. Learn that comments are not a crime, `a_rose()` by any other name might not smell as sweet, and `HungarianNotationStr` might not be as outdated as you might think (though we can pretty it up a bit). We’re not talking immutable laws that must always be followed, but you’ll leave with some pretty good best practices that will boost your code’s comprehensibility.



Shift Digital Room | Async/Await from the Ground Up

STEPHEN CLEARY

An async refresher course for developers who use `async` and `await` but want to really understand what's going on. This session is a "re-introduction" to `async` and `await`. It covers what the keywords mean and - just as importantly - what they *don't* mean. We'll be covering What You Need To Know, including several different conceptual models of `async/await` that you can switch between at will. This refresher course will take a look at the common `async` best practices with a careful examination of why they're best practices and when to ignore the best practices. We'll be including some semi-advanced topics (specifically `ValueTasks`, asynchronous disposal, and `Channels`) to round out techniques for modern asynchronous development. While this talk is geared towards developers who already use `async` and `await`, it would also be appropriate for those who do not (yet). Feel free to bring questions!

11:00 AM | Thursday March 21st

Clean Coders Room | Reevaluating Software Design Patterns: Uncovering Patterns That Can Be More Burden Than Benefit

CHAD GREEN

Design patterns are potent tools in software development that solve recurring problems. These patterns have become essential in creating maintainable, scalable, and robust software systems. However, not all design patterns are created equal, and some well-respected patterns may inadvertently lead to increased complexity, decreased maintainability, and even hinder productivity. In this presentation, we'll delve into software design patterns that can cause more work than they are worth. Join us as we explore design patterns that have earned their place in software engineering history but may only sometimes live up to their reputation. We'll discuss real-world scenarios where these patterns can lead to unintended consequences, including convoluted code, performance bottlenecks, and intricate debugging sessions.



Shift Digital Room | How to build future-proofed applications

PETER VAN VILET

Change is the only constant, and it has been shaping the software industry for decades. During this period, numerous lessons have been learned. This session will explore five rules of thumb that facilitate the implementation of change without the need for extensive refactoring. By the end of this session, you'll have acquired new insights in enhancing the cost-efficiency of application development.

1:15 PM | Thursday March 21st

Clean Coders Room | Best Practices For Your Local Developer Environment

JIM REICK

In today's development world, applications have a lot of moving parts. As a developer, it's important to make sure your stories are tested well before handing them off to the next step in your development process. This talk will walk you through how to setup a development environment that empowers you to deliver high-quality software. We'll learn how to deploy software to Docker with Visual Studio, automated API testing with postman and some best practices for deployment pipelines.

1:15 PM | Thursday March 21st



Shift Digital Room | Developing Great Web APIs Architectures with ASP.NET 8

CHRIS WOODRUFF

You know you must have a great experience when you develop your apps. The most significant experience for your users centers around their data. That's why creating a great set of APIs is so important. Using ASP.NET 8 Web API is a modern cross-platform framework for the Web. ASP.NET 8 Web API can be run on Windows and Linux using all modern web servers. The secret is knowing how to architect your Web APIs for the best experience. The development story becomes more comfortable using the architecture, and your end users get a much more stable API set to consume. The talk will explain and get you started using these concepts with your ASP.NET 8 Web API solutions.

2:30 PM | Thursday March 21st

Shift Digital Room | Building SAAS faster with GenAI

AMAN SHARMA

This talk presents a forward-looking perspective on the integration of Large Language Models (LLMs) into existing SaaS platforms. We'll explore strategies for replacing extensive custom code with advanced LLM-based logic, thereby streamlining the software development process. The discussion will cover practical methods for embedding LLMs into various components of SaaS applications, emphasizing efficiency gains, scalability, and enhanced functionality.

3:45 PM | Thursday March 21st

Clean Coders Room | Blending Product Thinking with Architecture

JOEL TOSI

Too much design up front and you are bumping into the design all of the time (and losing time). Not enough design and your system can crumble in reality. How do you blend architecture so you have the right decisions at the right time, and give them enough due diligence? How do you embrace cloud and microservices and not risk getting into different failure scenarios or overly complicated maintenance and ripple effects? In this session we will walk through visualizations that help teams blend product thinking with architecture. Along the way, we will look at microservices and domain modeling as well as chaos engineering and fault tolerance - blending all of these into a context that is consumable by all and gives the right emphasis at the right time. Interested in CRC cards? You've come to the right place. Leave this session with simple visualizations and approaches that you can apply immediately to start blending product with architecture, especially if you are looking to run in a cloud world.



9:45 AM | Friday March 22nd

Shift Digital Room | Web, Desktop, and Mobile Development using Wisej.NET

LEVIE RUFENACHT

Wisej.NET is a framework for building line-of-business (LOB) applications using .NET Framework & .NET Core. The session will introduce the framework and show how it can be used to build applications for web, desktop, and mobile using one shared codebase in C# or Visual Basic. Developers will learn how to use the WYSIWYG Wisej.NET Designer in Visual Studio to build UI, manage events, test & deploy the app on Web, Android, iOS, and Windows Desktop. The session will also show a simple migration of a Windows Forms (WinForms) application to the web using Wisej.NET.



11:00 AM | Friday March 22nd

Infoblox Room | Strategic DDD to Organize Teams

JOEL TOSI

So you have a legacy product and making changes is difficult. Teams are dependent on teams dependent on teams. More planning doesn't solve this problem, a fundamentally architectural problem. Enter the world of Strategic DDD. In this session we will look at and learn how to apply Strategic DDD to your product to look at what a focus on cognitive load and context would look like to team structure. We will - Look at events and significant events, - Look at actors and systems on products, - Create bounded contexts around teams, - Given team boundaries, look at communication protocols and data ownership, Talk strategies on how to roll this out in your organization, Leave this session with tangible ways to approach architecture and team structure that optimizes flow and reduces cognitive load on teams

1:15 PM | Friday March 22nd

Shift Digital Room | Embracing Sustainability: Developing Green Software Architectures with .NET 8

CHRIS WOODRUFF

In today's environmentally-conscious world, it is more important than ever to create software that performs efficiently and minimizes its impact on the environment. This talk will explore how to develop sustainable, green software architectures using .NET 8, the latest version of the popular development platform. We will begin by discussing the concept of green software and its fundamental principles, including energy efficiency, resource conservation, and electronic waste reduction. We will then dive into the features and enhancements introduced in .NET 8 that can aid in creating eco-friendly software solutions. By the end of this talk, attendees will understand the role that .NET 8 can play in creating sustainable software architectures. They will also be equipped with practical tips and strategies to implement green software principles in their own .NET projects, contributing to a cleaner, greener future for us all.

Cyera Room | From monolith to microservices and beyond

PETER VAN VILET

The monolithic architecture is - after being overshadowed by microservices for years - working on a comeback. This seems strange, but is far from it. In this talk we'll look at the new insights and developments in the field of future-proof and scalable application architecture.

CODING

2:30 PM | Friday March 22nd



Clean Coders Room | Getting started with Blazor

DAN SCHNAU

Blazor allows developers to use the power of .NET and C# to build full stack web apps without writing a line of JavaScript. Blazor apps run anywhere - either in the server or natively in the browser thanks to WebAssembly. In this talk I will describe the technological landscape of Blazor, describe its advantages and disadvantages, and demonstrate some of the features of Microsoft's new single page application framework.

Hashicorp Room | Accelerating Delivery During a Legacy Transformation

ANDREW PIRKOLA

Legacy technology transformation is a big part of modern IT and solving this problem takes more than a few brilliant minds or a big project to solve. It requires tapping into the creativity and talent of the entire organization and aligning it to a new way of thinking and working for every person every day. In this talk we'll share the architectural principles used to align and inspire one such transformation. We'll dive into what those principles are, why they matter, and how they've helped do something more important than just modernize legacy technology - how they've helped accelerate the delivery of business value as part of the transformation as opposed to making us faster after the transformation was completed.

3:45 PM | Friday March 22nd



Infoblox Room | Application Architecture Patterns

JOSEPH GUADAGNO

Architecting an application can be challenging. What do you do to keep your application flexible to ever-constant requirement changes? How do you handle landscape changes (cloud, on-premises, databases)? How do you avoid over-engineering the application? How do I make sure my application plays well with other applications? In this session, we'll take a look at some well-understood and practiced Software Architecture patterns. We'll cover these patterns at a high level to understand how to use these patterns in different scenarios. You'll walk away with some knowledge, tips, and tricks that you'll be able to use for new and existing applications.



CYBERSECURITY, OBSERVABILITY AND SYSTEM ADMINISTRATION



11:00 AM | Thursday March 21st



Cyera Room | Making Privileged Access Easier with the Cloud

MICHAEL SOULE

You maintain privileged access for yourself and others in your organization, but you want to make that easier, more efficient, and not compromise security. You will see how to apply Microsoft's Security Rapid Modernization Plan (RAMP) for privileged access management. Work with Entra Privileged Identity Management for Just in Time administration. Integrate Azure Bastion for interactive sessions. Use managed identities and service principals with PowerShell for implicit privilege. Use code promotion for production isolation.

1:15 PM | Thursday March 21st

Google Cloud Room | An IT Operations Approach to Observability

MICHAEL SOULE

The weight of maintaining your organization's critical services is on your shoulders. You can manage that infrastructure efficiently and stay ahead of issues. Using PowerShell as your tool of choice, you will obtain clear visibility of your service operations. Review a framework for customizable state monitoring. Work with the Windows Task Scheduler and Event Logs to monitor state. Aggregate state events with Azure Monitor. Create incidents proactively and apply continuous improvement.

2:30 PM | Thursday March 21st

Infoblox Room | Hacking Google - the best defense is a good offense

JEFF BAIRD

The best defense is a good offense: The story of what happened, how Google responded and what technologies resulted.

3:45 PM | Thursday March 21st

Palo Alto Room | You Inherited an Identity Mess, Now What?

MICHAEL SOULE

Identity is critical to modern cyber security practices. However, identity practices are far from modern and are arguably not secure. Brace yourself for eye-opening insights as we explore the challenges faced by many in adopting modern and secure identity practices. Get ready to improve your security practices with practical and actionable guidance.

9:45 AM | Friday March 22nd

Cyera Room | Cloud Security Demystified

DALE RODRIGUEZ

Mystified by the alphabet soup of cloud native security? Perhaps your productivity has been disrupted by the number of new acronyms - CWPP, CSPM, KSPM, and the list goes on. This talk will educate about these acronyms and their real world implications as well as provide best practices to address security issues for each one. Also this talk aims to educate beginners' and newbies to cloud native security, as well as experienced practitioners.

11:00 AM | Friday March 22nd

Palo Alto Room | "Resting Breach Face"

CHARLES BREWINGTON

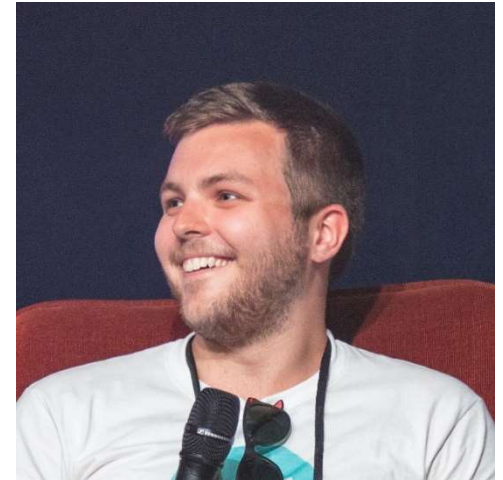
What leads to a cloud security breach? Misconfigurations, exposed APIs, vulnerability exploitation, and more. Attacker motivations haven't changed much, but their methods have adapted to new technologies. As a defender, you must adapt too. Learn about the differences between cloud vs on-premise threats and breaches. What has changed? Are certain attack types more prevalent, attractive, or easy to execute in the cloud? Why? What are the high-level cloud attack trends (and defenses) and how to cope? We will walk through several examples of real cloud breaches based on analysis from the Sysdig Threat Research Team. We focus on the attack patterns, response patterns, and other interesting elements that give insight into how to better protect and respond to incidents in cloud environments. You won't hear general, "lock your stuff down" guidance; each scenario will have a specific takeaway so you can avoid a similar pitfall. After this talk, the audience will have an in-depth understanding of common cloud breaches currently running in the wild, lessons learned, and a full list of actions to avoid ending up in the news.

1:15 PM | Friday March 22nd

O'Reilly Room | All your secrets are belong to us

CALLUM WHYTE

Admit it: we've all checked in an API key or password to a repo at some point... Oops... No one wants their secrets to accidentally leak, so this session is your essential refresher on secret management (and mismanagement!) for your applications and beyond! Let's explore the range of methods and benefits of securely handling secrets for local development: from features baked into your IDE (Visual Studio, Rider), to secret management services (Azure KeyVault, AWS / GCP Secret Manager), and even loading them from your password manager of choice (i.e. 1Password). We'll progress to look at accessing secrets as part of a CI/CD pipeline, or loading them into infrastructure at runtime, to eliminate hard-coded secrets from every aspect of our projects. What about when things inevitably go slightly wrong...? We will follow the stories of a few real world breaches: what went wrong, how we responded, the lessons we learnt, and how that feeds back into our processes. I will discuss the processes we have implemented with our clients to manage secrets on a large scale – including following a least trust approach, methods for revoking and cycling credentials, and appropriately mapping our dependencies so we can measure the impact of a change. Finally, we will look at the ways automation can help, including configuring automatic secret detection tools (GitHub and Azure DevOps) and CodeQL checks in our pipelines.



2:30 PM | Friday March 22nd

Cyera Room | Cybersecurity Compliance: Ain't Always About Being Technical

MUKTA SHARMA

While Cybersecurity is traditionally associated with writing scripts and code to protect digital assets, it goes beyond technical elements and is a spectrum that requires balanced management of technical and non-technical aspects. Compliance in cybersecurity involves following industry standards (such as SOC, ISO), legal regulations (such as GDPR, SEC Form 8K), and developing internal policies to protect sensitive information and ensure the integrity, confidentiality, and availability of data.

3:45 PM | Friday March 22nd

Palo Alto Room | How to Use CNCF's Falco to Protect Yourself From the New SCARLETEEL Attack!

MARAT SALAKHUTDINOV

A high percentage of reported cloud attacks have been due to automated operations: most of the steps of the initial access, discovery and execution are automated and there is not much human interaction. However, Red Teams are evolving their techniques and in certain cases, where they find an interesting target, they are switching to human-driven operations where the team of skilled hackers actively research the breach and try to figure out how to exploit your assets and steal your data. This advanced category of attacks is known as Advanced Persistent Threats (APT). The Sysdig Threat Research team recently found a new APT attack pattern, SCARLETEEL, sophisticated attack starts from a compromised Kubernetes container and spreads to the victim's AWS account. The end result isn't just a typical cryptojacking, but also the theft of proprietary and sensitive data. Luckily, we have Falco and can detect this kind of threats in cloud runtime!



DEVOPS AND DEVELOPER PRODUCTIVITY



9:45 AM | Thursday March 21st

Hashicorp Room | Dev Containers. What are they and why do you need them?

JOSEPH GUADAGNO

You're onboarding a new team member, or your team recently inherited a project that uses a different SDK/framework version than your current project uses. What do you do? Install the old SDK/framework versions? Can they even be installed at the same time on the same machine? What if I told you there was a way to accomplish this with little to no effort on your part? Well, with Visual Studio Code, Docker, and the Dev Containers extension, you can. Dev containers can help you easily on-board new people to your projects, allow for cleaner machines with greater support for multiple SDKs/Framework, and be able to develop/debug/run your solution from anywhere without Visual Studio Code. Oh, and put an end to ""It works on my machine"" In this talk, I'll walk through how you can set up a dev container to support your application development, without installing the SDK/framework on your machine. I'll show you how to get started and how you can solve the age-old problem of "It works on my machine!". As a bonus, if your code is hosted on GitHub, I'll show you how you can run/edit/debug your project right from GitHub.com without Visual Studio Code on your machine.

11:00 AM | Thursday March 21st

Hashicorp Room | Empowering DevOps with Azure Application Insights: Unleashing App Visibility

RANDY PAGELS

Experience the power of Application Insights, an intelligent Application Performance Monitoring service, as your ultimate tool for seamless app development and continuous deployments. Gain real-time analytics, deep insights, and unmatched diagnostic capabilities for your application logs and telemetry. Proactively detect and resolve issues, interactively diagnose problems, and integrate effortlessly with your existing DevOps workflows. Join us for an immersive journey and live demo to explore the latest capabilities of Application Insights, revolutionizing your DevOps practices and elevating your application performance.

DEVOPS AND DEVELOPER PRODUCTIVITY

1:15 PM | Thursday March 21st

O'Reilly Room | Blood, Sweat, & Code Reviews

DAVID GIARD

Code Reviews can sometime be painful and time-consuming, but they are an important part of delivering quality software. A Code Review provides an opportunity to share knowledge, improve code and catch potential problems before they go to production. This can be a positive experience or a negative experience.

In this session, I will discuss the importance of Code Reviews and show some ways you can make your code reviews more productive, enjoyable, and successful.



2:30 PM | Thursday March 21st

Infoblox Room | The Power of DevOps in the Real World

RANDY PAGELS

In the realm of software development, the year is 2023, where good DevOps practices have transformed from mere aspirations to absolute necessities. Continuous value delivery to our end users has become paramount, yet mastering this art is no small feat. Join this epic session on Real World DevOps, where we delve into the ""why's"" and ""how's"" of DevOps. Uncover its importance and our unwavering commitment to excellence. Witness a real-world marvel as we forge a complex, modern application from pure source code—no infrastructure exists—ultimately deploying it flawlessly to the cloud, including continuous testing. Explore web front ends, APIs, mobile apps, and beyond, harmonizing all modern technologies. But this is no mere showmanship. Prepare to immerse yourself in advanced DevOps techniques and best practices, prioritizing developer security, infrastructure as code, and fostering collaboration. Experience the transformative power of GitHub Actions as we push the boundaries of the DevOps workflow. Through cutting-edge tooling, we'll unveil a breathtaking demonstration, defying limits and propelling you into an unforgettable journey through the future of software development.



DEVOPS AND DEVELOPER PRODUCTIVITY

3:45 PM | Thursday March 21st

Infoblox Room | Soar to New Heights Devs! Master Coding with GitHub Copilot and Chat.

RANDY PAGELS

Welcome aboard our journey into the future of coding with GitHub Copilot, where we channel the Wright Brothers' spirit of innovation. Today, we soar beyond routine coding exercises, charting new territories in automated coding with Copilot as our guide. This session is a transformative leap, akin to the first flight at Kitty Hawk. With GitHub Copilot, you're not just coding; you're pioneering in the digital era. We're here to elevate your coding skills, empowering you to explore new horizons. As we conclude, remember that you are the Pilot ready to take-off with GitHub Copilot by your side. After the session you are ready to navigate uncharted coding landscapes and unlock your full potential.

9:45 AM | Friday March 22nd

Hashicorp Room | The Lean DevOps Playbook : Make it success from Day one

AMAN SHARMA

After working at 4 early stage startups, Aman complies and shared the behind-the-scenes of tech startups from Disaster to Bliss DevOps. Also sharing some blunders that would make the audience chuckle. The session will include Code and Repo Structuring including Monorepo, Lean Product and Sprint management, Minimal CI/CD that saves tonne of time, Automations that you will thank later, Containerisation and deployments, Other Code best practices like documentation, DevEx, Analysis etc.



11:00 AM | Friday March 22nd

O'Reilly Room | From Waterfall To Agile – And Beyond

BAS MEEUWISSEN

Managing a software development project is challenging. Business wants predictability, development wants adaptability. Modern methodologies and frameworks like Scrum are trying hard to align them. In the meanwhile, the world is shifting towards continuous delivery. How does this fit the picture? Can we still use time-boxes like sprints? Should we go for Kanban? In this talk we'll go on a practical journey in present time. Join me if you want to learn how to pick or compose an approach that fits your needs!

DEVOPS AND DEVELOPER PRODUCTIVITY

1:15 PM | Friday March 22nd

Hashicorp Room | Metrics that Matter - Moving from Easy to Impactful

JOEL TOSI

This session is a walk through of a popular blog post we did on metrics. In general, we are leading transformations where the standard questions around metrics (velocity, bug, mtrr, come up) - and we use these groupings to help organizations to get some answers for questions organizations want, but also understand their limits. I.e. if code coverage goes up, that might be good directionally but does not say we are getting code coverage of the important code paths. We wrap up the session giving examples of more impactful measurements and walk through process behavior charts to help separate signal from noise in data.

3:45 PM | Friday March 22nd

Clean Coders Room | Feature Flags: Release without Fear

JOSH KLEIN

Over the past few decades, agile software development as a mindset has changed the industry from top to bottom. Delivering working feature increments on a regular schedule is now the expected model for high performance software engineering organizations. However - some features are bigger than what can be accomplished in one sprint. And moreover what happens when a code deployment cause performance degradation and needs to be rolled back, and quickly? How can features deployment be controlled safely and with confidence? What if you wanted to deploy a feature to just a small subset of your users? Or a big subset? Enter the humble feature flag. These booleans as a service can wrap code and be used to target what code gets released, and to whom. They allow for nearly instantaneous rollbacks and ramp-ups of feature deployments, slicing and dicing a user base in a multitude of ways. Excited to learn more? Join me in this session as I discuss the finer points of feature flagging.





FRONT END AND DESIGN



FRONT END AND DESIGN

9:45 AM | Thursday March 21st

O'Reilly Room | The Keys To An Accessibility Mindset

DANIEL YUSCHICK

How do you get started with web accessibility? It's easy to get lost amongst the trees of accessibility. In this talk, we will zoom out to look at the forest as a whole. Explore how assistive technologies understand, or in some cases don't understand, common design and development patterns with screen recorded demos. Without looking at a single line of code, we will learn how to make decisions at the earliest stages of design and development to positively impact our users. We will learn that accessible design is good design. And with the keys to an accessibility mindset, we will learn how to make our products more accessible in a way that feels natural.

1:15 PM | Thursday March 21st

Hashicorp Room | Unit Testing Real World Applications

SCOTT PRICE

There are many online tutorials that show how to unit test front end code. All of them that I have seen give example code to unit test that is well written and easy to test. Then you get your first job and are presented with components that are over 1000 lines long, written in a hurry, by people who did not really understand the framework in which they were written. This talk will address how to unit test such front end code using a real world component written in Vue.

2:30 PM | Thursday March 21st

Palo Alto Room | React Component Profiling

WOUTER VAN SCHANDEVIJL

A real world React component rendering performance optimization war-story of a back office React application (5s to 150ms) given as a workshop and/or tech talk at itenium. Pretty much everything that could happen to negatively impact performance, did. First npm packages needed replacement because they couldn't handle large amounts of components, or were just too heavy for the task at hand. Second, too much I/O (localStorage) for checking access/roles. Then further optimization was done with reselect (createSelector), useMemo & memo. Each time the next performance target/component was selected using the very simple, yet very good, Chrome Profiler extension. At this point performance was back at a very acceptable level but for the sake of the tech talk, we dived deeper into alternative solutions (pagination, virtualization, WebWorkers, ...) and additional tooling (useDebugValue, console.time, Profiler, useDeferredValue, ...)

FRONT END AND DESIGN

3:45 PM | Thursday March 21st

Hashicorp Room | The Hidden Requirements: Exploring Emotions with Placebos

DAMIAN SYNADINOS

Traditionally, products and services are focused on various functional and non-functional requirements (things the product or service should be or do). While this is important, there has been a lack of focus on emotional requirements (feelings that the the product or service should induce in its users). Why is this important? Because the way we feel is important and should be considered! A bold claim? Perhaps. And, as with any claim, it should be supported with evidence. In this talk, I stress the importance of emotional requirements and support the claim by providing relevant facts, opinions, statistics, quotations, examples, hypotheticals, and more. Once I've sufficiently supported the claim, I offer a few practical methods by which to gather, induce, and test emotional requirements. Finally, I use placebos as lens to view systems and gain insight into emotional requirements. Join me for a thoughtful and thorough exploration of The Hidden Requirements!



11:00 AM | Friday March 22nd

Shift Digital Room | Building Better Components — A Journey to a More Resilient Frontend

DANIEL YUSCHICK

Components are at the core of modern development. However, for as much as they can help empower our work, they can harm and hinder it. Building resilient components requires careful planning and collaboration. And, of course, requires avoiding the common pitfalls of component design. This talk will teach us how to avoid common mistakes in component design. We'll learn how to build resilient frontends that can build trust across teams and grow with our products.



GAME DEVELOPMENT, HACKING AND OPEN SOURCE



GAME DEVELOPMENT, HACKING AND OPEN SOURCE

11:00 AM | Thursday March 21st



Palo Alto Room | Coding for Change: Navigating Open-Source Project with Social Impact

KRUNAL PATEL

Have you ever contributed to open-source projects focusing on social impact? Embark on a journey of coding with purpose and its rewarding impact. Learn to identify, engage, and make a difference in social initiatives. Discover how I found the Human Essential project, how it aligned with my interests as a parent, and contributed meaningfully. Uncover the satisfying impact of open-source projects - like helping process 80,000 diapers/month for a diaper bank. Get inspired to submit your first pull request, connect with the Ruby community, and leverage your skills for social change.

11:00 AM | Friday March 22nd

Cyera Room | Hacking the Cloud: Play-by-Play Attack on GitHub, Okta, and Salesforce

SCOTT SHAFER

Varonis Technical Evangelist Scott Shafer demonstrates how an attacker uses off-the-shelf security tools, API calls, and scripting to discover secrets in a public repository. This leads to user impersonation in Okta, privilege escalation and sensitive data discovery in Salesforce, and ultimately data exfiltration from AWS. We'll show you how Varonis can help detect and defend against these types of attacks at every step.



GAME DEVELOPMENT, HACKING AND OPEN SOURCE

2:30 PM | Friday March 22nd

Palo Alto Room | Streamlining the Mortgage Process with Open Source, Distributed Ledger Technology

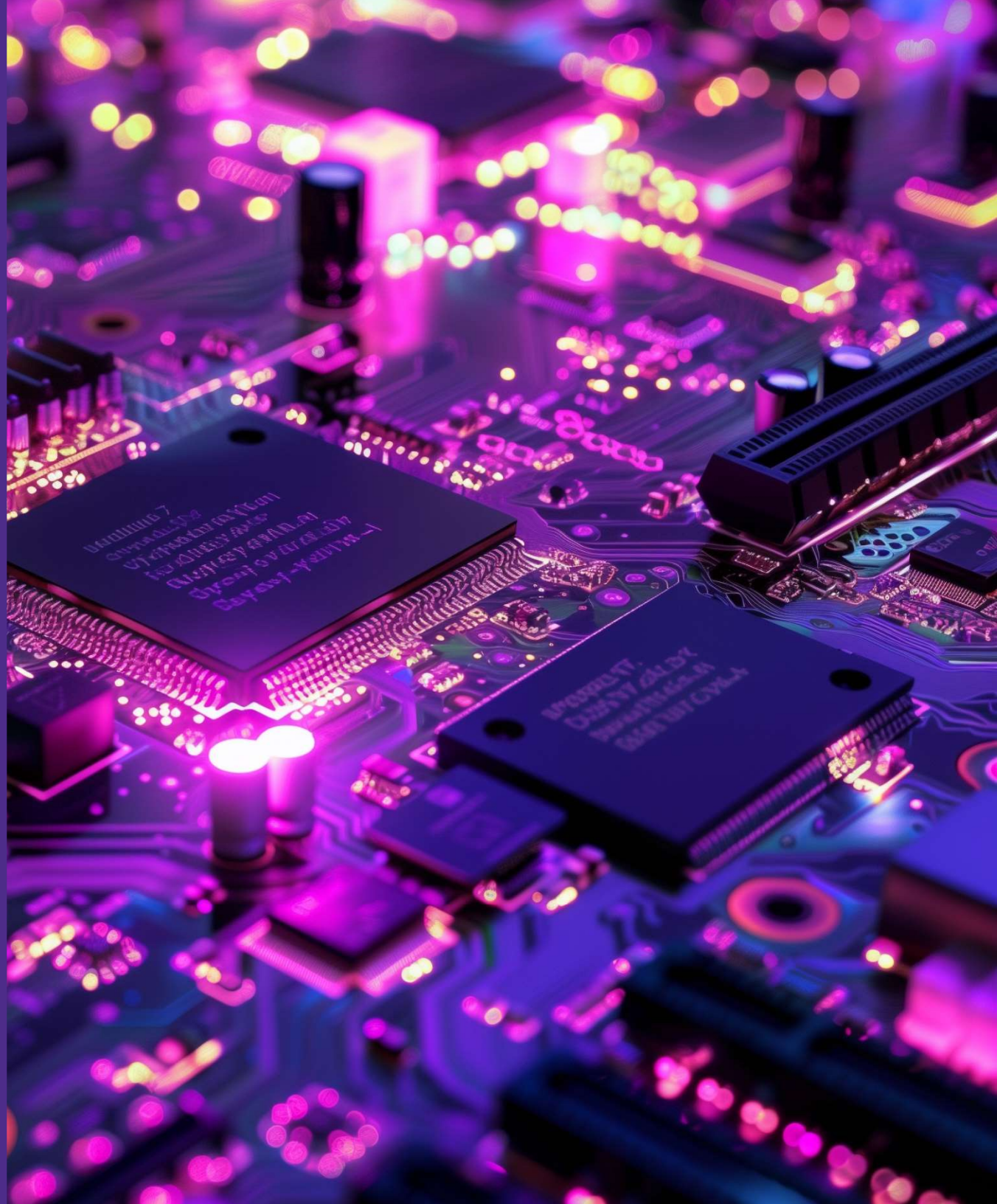
MATTHEW BAGAZINSKI

Did you know that the average mortgage takes more than forty days to close, involving a complex web of communication among over half a dozen parties? The open source nature of distributed ledger technology can revolutionize the traditional mortgage process. By serving as a central source of truth, blockchain facilitates efficient interaction among all parties, while employing encryption methods to keep sensitive information secure. Together, let's envision a future where technology streamlines the mortgage process and makes the housing market more inclusive.





HARDWARE, IoT AND EDGE COMPUTING



HARDWARE, IOT AND EDGE COMPUTING

1:15 PM | Thursday March 21st

Cyera Room | Protocol Design

STEPHEN CLEARY

This language-agnostic talk will examine the design of application protocols, with a focus on TCP/IP. This talk is part history and part practical implementation. If you have a need to design a TCP/IP protocol, then this talk will cover everything you need. Most bugs in TCP/IP applications are actually misunderstandings about TCP/IP itself, so this talk highlights the parts of TCP/IP that are most problematic with practical advice about avoiding pitfalls with your application protocol. We'll also be covering several mistakes from history as we go along, most specifically HTTP and the improvements it made with HTTP/1.1, HTTP/2, and the new HTTP/3 based on QUIC. Spoiler alert: QUIC is the future for almost all protocols; we'll cover how QUIC compares to TCP/IP specifically in terms of application protocol design. Today TCP/IP is more available (in terms of APIs), but QUIC is not that far off, and this talk will cover application protocol design considerations for both.

3:45 PM | Thursday March 21st



Cyera Room

We know your appliances are broken before you do - profiling failing appliances with energy usage

RYAN SHAHBAZI

With the increasing availability of more granular energy consumption, utilities are able to model that usage and identify patterns that indicate a potentially failing appliance, such as a leaking water heater. This talk will demonstrate how SoCalGas, the United States' largest natural gas distribution company, collects and analyzes data from its network of advanced meters to bring added value to the customer. Further, attendees will see a full scale connection between IT, business units, customer service, and customers in what the concept of DevOps brought to life.

HARDWARE, IoT, AND EDGE COMPUTING

9:45 AM | Friday March 22nd

Intelepeer Room | IoT on Azure Data Services Overview

RANDY PAGELS

Come think like a geek and join us and learn about the power of a Raspberry Pi device combined with Azure. IoT devices can be pretty powerful but sometimes it's hard to determine what IoT can do for your company and what business solutions you can solve. You probably already have capabilities to grab data through sensors, but what do you do with the data? How do you manipulate the data? How do you get actionable insights? And creating these applications takes a long time and a lot of code, right? Not necessarily. Together, in this session, you will learn how to build out a real-life IoT scenario by capturing IoT data and ingesting it into the Cloud. We'll explore the amazing visualizations and insights we can draw from that data by applying Azure services like Azure Functions, Logic Apps, CosmosDB, Azure Maps, and more. You will see how you can create an end-to-end IoT application in a day, you'll see how easy it is to leverage Azure tools to innovate with IoT, and hopefully come away with some great ideas of your own.

2:30 PM | Friday March 22nd



Ben Brown, CTO, Canopy

Infoblox Room | Concept to Market: Navigating the Innovation Journey in 18 Months

BEN BROWN

Join me, VP of Engineering and Chief Technology Officer @ Canopy, on an exploration of my journey from ideation to market launch. In this session, I'll share the behind-the-scenes story of how my team conceptualized, developed, and successfully launched a groundbreaking product featuring entirely new IoT hardware, software, and cutting-edge AI capabilities.



LEADERSHIP AND PROFESSIONAL DEVELOPMENT



LEADERSHIP AND PROFESSIONAL DEVELOPMENT

9:45 AM | Thursday March 21st

Cyera Room | Let's talk interviewing: How to stand out and get that offer!

MICHAEL EATON

Interviewing is hard. Being across the table from one or more interviewers or standing in front of a whiteboard with a marker that barely works in clothes you probably only wear at interviews, trying to figure out how to answer the obscure question you were just asked while everyone is staring at you can be stressful and scary. This session will give you proven strategies and tactics to help put you at ease, but also make you stand out so you nail the interview and get the offer!

11:00 AM | Thursday March 21st



O'Reilly Room

Leading the Future of Mortgage Lending: Innovation and Apple-Inspired Philosophy

JASON BRESSLER

Join Jason Bressler, CTO of United Wholesale Mortgage, as he unveils how combining robust in-house technology development with the innovative ethos of Apple is transforming the mortgage lending landscape. Discover the power of tech leadership, the strategic cultivation of raw talent, and the adoption of a user-centric, forward-thinking approach in revolutionizing one of the most vital sectors in financial services. Engage in this insightful journey through the fusion of technological innovation and visionary leadership that is setting new standards in mortgage technology.

1:15 PM | Thursday March 21st

Palo Alto Room | That's not "real" Scrum: Measuring and managing productivity for development teams

KAITLYN CONCILIO

The first rule of Scrum is that everyone else is doing Scrum wrong. The first rule of Agile is that you're actually just doing Waterfall with sprints. We're going to talk about the philosophies of Scrum and Agile, and what the hell you're actually supposed to be using story points for. We're gonna dig deep into how you should actually be measuring your dev team's productivity. We'll go over some common misconceptions and pitfalls, and finish up with some tips for practices you should be striving for as well some baby-step approaches to fixing your processes.

LEADERSHIP AND PROFESSIONAL DEVELOPMENT

1:15 PM | Thursday March 21st

Intelepeer Room | Content isn't the problem - Application is

JOEL TOSI

Content - How to do something; learn a new technique; configure a new tool; write some code in a new framework - the content is everywhere. Yet, with all that content, why is it not easy to immediately apply new learnings at work? The problem is we try and substitute content and seeing / hearing with doing. In this session we will frame up the new for a new way of learning (learning in the flow of work instead of learning as an outlier). We will look at how teams achieve this, what changes occur to the team and organization to support this, and what the outcomes are for teams and organizations that have tried this approach.

2:30 PM | Thursday March 21st

Cyera Room | Technical Debt Is Not Free

CHAD GREEN

So many software development teams rack up technical debt and do not even realize it. But even if you are a more mature team and recognize and maybe even document technical debt, what good is it if you do not take action. Just like in other parts of our life, just because we can accumulate bunches of debt, if we do not take steps to handle it, we will be destined for bad times when that comes due. In this session, we'll explore technical debt, how to properly document and track it, and - more importantly - how to address it so that it does not cause significant issues down the road.



2:30 PM | Thursday March 21st



Shift Digital Room | Leading A Technical Team

JERRY VASQUEZ

This session will dive into the subtle skill of team leadership by identifying the personalities a leader can expect to meet and learning the language necessary to communicate effectively. With that foundation, we'll learn effective ways to ensure your company's Key Initiatives are conveyed clearly and appropriately digested, clearing the road for your team to operate nimbly and efficiently. Lastly, we'll learn some tips on how to engage with technical teams, specifically.

3:45 PM | Thursday March 21st



O'Reilly Room

Unleashing the Potential: Harnessing the Advantages of ADHD and Autism Traits

GAINES KERGOSIEN

Attention-Deficit/Hyperactivity Disorder (ADHD) and Autism Spectrum Disorder (ASD) are often viewed as disorders with negative consequences. However, individuals with these conditions can exhibit seemingly superhuman abilities in the right setting. This session will explore the potential benefits of traits commonly found in individuals with ADHD and ASD, such as heightened attention to detail, strong focus, and an aptitude for pattern recognition. We will also discuss strategies for harnessing these advantages in the workplace and other environments. By understanding and utilizing these strengths, individuals with ADHD and ASD can achieve greater success and fulfillment in their personal and professional lives. This session aims to shift the conversation from deficit-based thinking to a strengths-based approach, highlighting the unique and valuable contributions of individuals with ADHD and ASD.

9:45 AM | Friday March 22nd

Palo Alto Room | 7 Habits of Highly Successful Developers

GAINES KERGOSIEN

Software and website developers are in extremely high demand and rates continue to climb, but many developers have not yet realized their potential. Being good at what you do is important, but it's equally important that you can communicate the value you bring to an organization and build a reputation that will provide opportunities for growth, both professionally and financially. We will work together to measure your accomplishments, establish a personal brand, and walk away with a resume that conveys your true value!

Google Cloud Room | Beyond Technology: Skills for Success

MICHAEL EATON

A fine line exists between being good at what you do and being truly fantastic. It's not about mastering the most complex technical skills or having the ability to perform intricate tasks effortlessly. This talk is about those universally important 'soft skills.' In this enlightening session, you'll discover five critical skills that will help you excel not just in your profession, but in life as well.

LEADERSHIP AND PROFESSIONAL DEVELOPMENT

11:00 AM | Friday March 22nd

Infoblox Room | Build the Computer Science Pipeline You Needed

MATTHEW WILLIAMS

Combine your passion with your skillset to create a computer science community. Microsoft Philanthropies TEALS (Technology Education and Learning Support) program aims to improve not just the workforce but quality of life for all by building computer science pathways in schools. We do this in a partners first approach in order to preserve resources, build stronger communities, and increase impact. In this session, you will learn how you can improve computer science access, recruitment, and retention. How to use your skills to help us to build an equitable and inclusive pipeline of computer science students. Come join us as we build communities around 21st century student's need to understand the world of computer science.

1:15 PM | Friday March 22nd

Infoblox Room | Leadership Journey: From Individual Contributor to Leader

MICHAEL EATON

You've spent years working on your technical skills and can write code with the best of them. Then, one day, a leadership position opens up on your team, and you start thinking about it. Should I or shouldn't I? What if I hate it? What if I love it? What if I'm not that good at it? In this session, we'll explore "why leadership," answer some hard questions, and discuss one developer's path from individual contributor to leader.



2:30 PM | Friday March 22nd

Shift Digital Room | How to grow a thriving and engaged remote team

JULIE CAMERON

Remote work can be difficult, especially if you're coming from an onsite dynamic, but after 10 years of working remotely and building engaged teams while doing so - I've identified a number of processes, techniques, and approaches that really work. Join me to learn how you too, can grow a thriving and engaged remote team! We'll cover: meeting optimization, async communication, templates and workflows, team goals & roadmapping, 1-on-1s and career progression, and much more. These techniques are based in empathy, empowerment, autonomy, and collaboration, and could inform anyone leading or working in a remote space.

3:45 PM | Friday March 22nd



Phil Oriani



Lee Jelenic



Hilary Doe



Tim Slusser

O'Reilly Room

Modern Challenges, Modern Solutions: Navigating Michigan's Digital Future

TIM SLUSSER, HILARY DOE, PHIL ORIANI, LEE JELENIC

In an era where digital transformation is pivotal for economic resilience and innovation, Michigan stands at the forefront, embracing challenges and leveraging technology to shape its future. This panel brings together esteemed leaders from the private sector, government, and economic development to discuss how Michigan is crafting a comprehensive digital strategy. We will delve into collaborative efforts, innovative solutions, and leadership strategies driving Michigan's digital evolution.

Hashicorp Room | Talking About Talking

DAMIAN SYNADINOS

I began speaking professionally in 2016. I began speaking at conferences in 2014. I began speaking in 1973. In this informal, educational, and enjoyable session, I will offer lessons learned from a lifetime of formal and informal talking. I will share, and we will discuss (among other things): Why – I began speaking at conferences, and why you might, too. What – Topics I select, and which might work for you. How – I create a talk, and how you can develop ideas. Come prepared to ask and answer questions as we collaboratively converse, and “talk about talking”!



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Go to www.mitechcon.org before
registration closes.



Thursday March 21st and Friday March 22nd, 2024 | UWM Sports Complex | Pontiac, MI

Updated 3/19/2024