REGISTER NOW FOR UBERCONF-V & GET A FREE TICKET TO UBERCONF LIVE IN 2021!

TOPICS INCLUDE:

- Software Architecture
- Java 12/13
- Kotlin
- Functional Programming
- JVM Internals
- Javascript
- Security
- Spring & Spring Boot
- Code Quality, Testing & Refactoring
- Domain-Driven Design
- Kafka
- Microservices
- Docker
- Kubernetes
- Cloud Native Architecture
- Kafka
- Reactive Programming
- Gradle
- Big Data
- Machine Learning
- Leadership
- Professional Skills

Über

[ ü-bər, uə-bər ]

(prefix)

Being a superlative example of its kind or class: SUPER / ÜberConf

In the interest of the heath and well-being of you, our attendees, as well as our staff and speakers; ÜberConf 2020 will be taking place virtually, as scheduled, July 14-17th.

We are eager to deliver another amazing and immersive experience in a brand new format. Our new learning environment gives you access to an even broader range of topics. Plus, each interactive multi-media session will be recorded and available to add to your training library after the event.

Join us, July 14-17th for yet another unforgettable event!

ÜberConf is our flagship educational event for software engineers and technical leaders. ÜberConf is bringing everything you love about our live events online! Tickets for ÜberConf2020 include all sessions, video recordings, materials, and access to exclusive live content over the next 12 months!

ÜberConf is truly the ultimate destination for passionate technologists.

Register Today: UberConf.com
I’m writing because I would like to request approval to virtually attend UberConf 2020. UberConf is a four-day deep dive into modern software development practices taking place online July 14-17th. At UberConf, I will benefit from:

**Learning from the Industry’s Best**
UberConf speakers are not simply vendor representitives - they are industry-recognized experts, published authors, consultants, executives, and open source leaders.

**In-Depth 90 Minute Sessions**
UberConf boasts an industry-leading 90 minute session format. UberConf speakers and trainers go into greater depth to teach the detailed concepts our team needs to know.

**No Vendor Hall**
No Fluff Just Stuff understands that we, the attendees are the customer; not the legions of sponsors found at every other conference. UberConf is an environment for growth and learning, not vendor sales pitches & sponsored sessions.

**Full-Spectrum Training**
Effective engineers need significant technical depth, breadth, and domain knowledge. In addition, there is another equally vital aspect of being an effective technology leader - the soft skills like communication, leadership, persasion, and more.

With the knowledge and training I will receive at UberConf, I believe I will be better prepared to lead our initiatives, build a better technology platform, and bring more value to our organization. In particular I’d like to focus on knowledge to benefit these projects and initiatives:

---

Here’s an estimate of the conference costs:

- Airfare: $0
- Hotel: $0
- Full-day workshop Add-on: $475
- Conference: $2175

**Total:** Conference Only: $2175 With Workshop: $2650

If I register before July 3rd, I’ll save $400 with super early-bird pricing. Also, a complimentary ticket to next year’s event is included! I believe this conference will bring incredible value to the team and organization!

Warm Regards,
Tuesday, Jul. 14
8:30 - 11:00 AM : WELCOME - OPTIONAL ONE DAY WORKSHOP ATTENDEES - UBERCONF 2020 VIRTUAL
9:00 - 6:00 PM - Sessions
Session #1 : Archived by Mark Richards and Neal Ford

Session #2 : DevSecOps with Containers and Kubernetes by Josh Smith and Laine Minor
This DevSecOps Workshop is a unique hands-on experience for building, deploying, and securing containerized cloud-native applications using industry-standard open source technologies.

Session #3 : Refactoring - Continuous Improvement of Your Code Base by Llewellyn Falco
This is a high level talk about many of the misconceptions surrounding refactoring, including What refactoring looks like Why refactoring is often neglected The pace of change Making better choices The ROI on improvements

Session #4 : Master Git in a Day by Lyndsey Padget
Unless you've been living under a rock, you know that Git is the most popular source control management in development shops today. And for good reason; its power overshadows tools you may have used in the past, such as Subversion or Team Foundations. While most developers and companies know this, making the switch can be painful. It's all too common to lose code or introduce bugs because of difficulties merging or resolving conflicts. But fear not - it is possible to get comfortable with Git.

Session #5 : Foundations of Tech Leadership by Kate Wardin
According to a CareerBuilder study, only 40% of new tech leaders receive formal training when they become a boss for the first time. The rest are forced to get scrappy to quickly equip themselves with new skills, techniques, and mindsets to effectively transition into their new roles. This workshop was designed to fill this gap; providing tactical techniques and resources for both new and seasoned technical leaders!

Wednesday, Jul. 15
8:00 - 11:00 AM : WELCOME & OPENING KEYNOTE - UBERCONF 2020 VIRTUAL
9:00 - 12:30 PM - Sessions
Session #6 : Archived by Mark Richards
Reactive architecture patterns allow you to build self-monitoring, self-growing, and self-healing systems that can react to both internal and external conditions without human intervention. These kind of systems are known as autonomic systems (our human body is one example). In this 2 part live virtual workshop, I show you some of the more common and powerful reactive patterns you can use to automatically scale systems, grow systems, and self-repair systems, all using the basic language API (Java) and simple messaging (RabbitMQ). Through code samples in Java and live demonstrations, I show how the patterns work and also show you sample implementations. Get ready for the future of software architecture - that you can start implementing tomorrow.

Session #7 : This Ain't Your Parent's Java by Venkat Subramaniam
Java was once a language that dragged along and evolved at snails' pace. Thankfully, that's no longer the case. The recently years have seen accelerated development of both language features and JDK improvements. In this presentation we will dive into some of the recent changes of Java that are both fun and powerful to use and discuss where the language is heading in the near future.

Session #8 : GRAAL The Magnificent! by Daniel Hinojosa
Graal is a VM and an awesome VM at that. Able to run a variety of languages and fast. The execution times can be impressive too. This VM can run anything, JavaScript, Python 3, Ruby, R, JVM-based languages like Java, Scala, Kotlin, and LLVM-based languages such as C and C++.

Session #9 : Spring Boot: From zero to production in about an hour and a half by Craig Walls
In this example-driven presentation, we'll start with an empty directory and have an application (simple as it may be) running in a production environment, leveraging Spring and Spring Boot.

Session #10 : Productivity Master Class by Lyndsey Padget
Reclaim your time, your career, and your life by training yourself how to focus on what matters.

10:30 - 1:00 PM : UBERCONF 2020 VIRTUAL - WEDNESDAY: BREAK #1
11:00 - 2:30 PM - Sessions

Session #11 : Archived by Mark Richards
Reactive architecture patterns allow you to build self-monitoring, self-growing, and self-healing systems that can react to both internal and external conditions without human intervention. These kind of systems are known as autonomic systems (our human body is one example). In this 2 part live virtual workshop, I show you some of the more common and powerful reactive patterns you can use to automatically scale systems, grow systems, and self-repair systems, all using the basic language API (Java) and simple messaging (RabbitMQ). Through code samples in Java and live demonstrations, I show how the patterns work and also show you sample implementations. Get ready for the future of software architecture - that you can start implementing tomorrow.

Session #12 : From Java 9 to Current Version: Language and JDK Improvements by Venkat Subramaniam
The last big water-hose change to Java came in Java 9. Since then, thanks to the new release cadence, the language is evolving faster, but with bitsize improvements. With release every six months, we'll soon be seeing Java 15! In this presentation we'll explore the features of Java, both the language changes and the significant JDK changes, starting from Java 9 to the current version.

Session #13 : Quarkus by Daniel Hinojosa
Graal has already proved to be an important advancement in Java. One such feature is AOT, Ahead of Time Compiling which takes JVM byte code and converts it as a native application as if it was written in C. This means a great deal for those who need to develop fast microservices with natively compiled speed.

Session #14 : Reactive Spring: End-to-End by Craig Walls
In this example-driven session, we'll build a complete (albeit simple) Spring application, leveraging Spring's support for reactive programming at all levels, from the database to the client.

Session #15 : How to be an Awesome Ally by Lyndsey Padget
Most of us want tech to be an equitable and inclusive place where everyone feels comfortable. This session will focus on understanding and practical advice you can use to make your workplace more enjoyable and welcoming to all.

12:30 - 3:00 PM : UBERCONF 2020 VIRTUAL - WEDNESDAY: BREAK #2
1:00 - 4:30 PM - Sessions

Session #16 : Archived by Mark Richards

Session #17 : Exploring Collectors: One of the Most Powerful Utility Class in the JDK by Venkat Subramaniam
One of the most intriguing classes in the JDK is the Collectors utility class, with a collection of some highly powerful functions that are useful during the reduce operation of streams. The functions that are in this class have so much to offer and yet, due to their complex nature, often are not used as much as they should be. Using well defined live coded examples, we will take up several common programming problems. Discuss them quickly and drive the implementation of these using the Collectors' methods. By the end of this presentation you will know more throughly the power of Collectors and how to apply the methods in there.

Session #18 : Connecting Data to and from Kafka by Daniel Hinojosa
This presentation we will discuss Kafka Connect. Kafka Connect is an open source project from Confluent to either take information from a data store as a Source and possibly dump information into another datastore, a Sink.

Session #19 : Spring Boot: Application management with Actuator by Craig Walls
In this session, we'll explore the Spring Boot Actuator, a runtime component of Spring Boot that lets you peer inside a running application and, in some cases, even tweak configuration on the fly. We'll look at many of the Actuator's endpoints, learn how to customize and even create new endpoints, and see how to expose Actuator metrics to several popular instrumentation and monitoring systems.

Session #20 : The 10 Types of Difficult Coworkers (and How to Handle Them) by Lyndsey Padget
This session will help you approach difficult people and situations with more empathy, and more importantly, discover practical tips on how to diffuse their effect on you and your happiness.

2:30 - 5:00 PM : UBERCONF 2020 VIRTUAL - WEDNESDAY: BREAK #3
3:00 - 6:30 PM - Sessions

Session #21 : Archived by Mark Richards
Session #22: Migrating to Java Modules: Why and How by Venkat Subramaniam
Java Modules are the future. However, our enterprise applications have legacy code, a lot of it. How in the world do we migrate from the old to the new? What are some of the challenges. In this presentation we will start with an introduction to modules and learn how to create them. Then we will dive into the differences between unnamed modules, automatic modules, and explicit modules. After that we will discuss some key limitations of modules, things that may surprise your developers if they're not aware of. Finally we will discuss how to migrate current applications to use modules.

Session #23: Machine Learning Data Pipelines by Daniel Hinojosa
This workshop builds an entire event driven data pipeline with Machine Learning and Kafka. From Kafka where we use producers or Kafka Connect to generate information, we then will Kafka Streams to apply a machine learning model to make business decisions.

Session #24: Extreme Spring Testing by Craig Walls
In this session, we’ll look at various ways that the latest features of Spring and Spring Boot can help with testing the tough-to-test portions of an application.

Session #25: Badass 101 by Lyndsey Padget
Would Chuck Norris ask you to come hear him speak at a conference? No, he wouldn’t. He would TELL you that you’re coming, and then roundhouse kick you in the face if you gave him any more lip.

4:30 - 7:00 PM: UBERCONF 2020 VIRTUAL - WEDNESDAY: BREAK #4
5:00 - 8:30 PM - Sessions

Session #26: Architectural Anti-Pattern: Lock In & How to avoid it. by Llewellyn Falco
The single worst architectural anti-pattern is also the one I see the most often. It locks you into an architecture. Makes your choices permanent and inhibits being able to respond when you need to scale.

Session #27: Continuations and Fibers: The New Frontier for Java by Venkat Subramaniam
We will program with Java quite differently in the future than we do today. The reason is that Java is embracing asynchronous programming like never before. This will have a huge impact on how we create services and web applications. In this presentations we will look at what asynchronous programming is, what continuations are, how they get implemented under the hood, and how we can benefit from them.

Session #28: Machine Learning Data Pipelines (continued) by Daniel Hinojosa
This workshop builds an entire event driven data pipeline with Machine Learning and Kafka. From Kafka where we use producers or Kafka Connect to generate information, we then will Kafka Streams to apply a machine learning model to make business decisions.

Session #29: Mental Bookmarks and the Fractal Nature of Success by Kenneth Kousen
Good discussions are supposed to diverge from their intended path. Free association is a feature, not a bug, and helps you see new connections between ideas. Without structure, however, it can be difficult to add context to new ideas and understand how they relate to more immediate problems. This talk discusses the technique of mental bookmarks -- how to remember where you were when a discussion diverged. In addition to giving you a reputation for having an amazing memory, the skill also helps with personal awareness in general.

Session #30: Finding Signal in the Noise: The art of Execution by Michael Carducci
In tech teams it's a constant firefight. We react. Then we react to the reaction... the cycle continues. In all this noise, in all this chaos, how do we move forward. How do we remain proactive?

Thursday, Jul. 16
8:00 - 11:00 AM: UBERCONF 2020 VIRTUAL: EXPERT PANEL DISCUSSION
9:00 - 12:30 PM - Sessions

Session #31: Archived by Mark Richards
The path to migrating to Microservices from a monolithic or service-oriented architecture (or even starting a greenfield application) is riddled with challenges, pitfalls, canyons, demons, and even fire-breathing dragons. I like to call it "The Kings Road". In this session I will show the migration patterns that allow you to easily fly over this challenging road and ease the pain associated with moving to microservices. I will also show you some automation tools you can use to help analyze your applications to determine how challenging this road will be.
Session #32: Learning To Code In Functional Style with Java by Venkat Subramaniam
Functional style of programming was introduced in Java 8. If you are like the speaker, who spent decades on imperative style, then the transition to functional style can be intimidating. In this presentation, we will learn about the fundamentals of programming in functional style, the set of tools that we can reach into to solve problems as a series of state transformation. We will learn the how but also the benefits along the way as well.

Session #33: 12 (15) Factor App Workshop by Christopher Judd
Learn how to use Heroku's 12 (15) Factor App methodologies to make your applications more portable, scalable, reliable and deployable.

Session #34: Web Security Workshop by Brian Sletten
If you're not terrified, you're not paying attention. Publishing information on the Web does not require us to just give it away. We have a series of tools and techniques for managing identity, authentication, authorization and encryption so we only share content with those we trust. Before we tackle Web Security, however, we need to figure out what we mean by Security. We will pull from the worlds of Security Engineering and Software Security to lay the foundation for technical approaches to protecting our web resources. We will also discuss the assault on encryption, web security features and emerging technologies that will hopefully help strengthen our ability to protect what we hold dear.

Session #35: Systems thinking by Raju Gandhi
Albert Einstein once said — "We cannot solve our problems with the same thinking we used when we created them." As developers, architects, managers, tech-leads, our job entails solving big problems. However, our systems are composed of parts, and it is the interaction of those parts that ensure the system works, and tells us where to go looking when things fail. What does it mean to think in systems? What are the benefits, and what are tools available to us? If any of this intrigues you (and it should) come join me as we explore a new way of thinking about problems, both big and small.

10:30 - 1:00 PM: UBERCONF 2020 VIRTUAL - THURSDAY: BREAK #1
11:00 - 2:30 PM - Sessions

Session #36: Archived by Mark Richards
Have you ever wondered how to share data between microservices? Have you ever wondered how to share a single database schema between hundreds (or even thousands) of microservices (cloud or on-prem)? Have you ever wondered how to version relational database changes when sharing data in a microservices environment? If any of these questions intrigue you, then you should come to this session. In this session I will describe and demonstrate various caching strategies and patterns that you can use in Microservices to significantly increase performance, manage common data in a highly distributed architecture, and even manage data synchronization from cloud-based microservices. I'll describe the differences between a distributed and replicated cache, Using live coding and demos using Hazelcast and Apache Ignite, I'll demonstrate how to share data and also how to do space-based microservices, leveraging caching to its fullest extent.

Session #37: Functional Programming Idioms by Venkat Subramaniam
A number of developers and organizations are beginning to make use of Functional Programming in Java. With anything that's new, we often learn it the hard way. By stepping back and taking a look at programming style as idioms, we can quickly gravitate towards better coding style and also avoid some common traps that we often get drawn towards.

Session #38: 12 (15) Factor App Workshop (continued) by Christopher Judd
Learn how to use Heroku's 12 (15) Factor App methodologies to make your applications more portable, scalable, reliable and deployable.

Session #39: Web Security Workshop (continued) by Brian Sletten
If you're not terrified, you're not paying attention. Publishing information on the Web does not require us to just give it away. We have a series of tools and techniques for managing identity, authentication, authorization and encryption so we only share content with those we trust. Before we tackle Web Security, however, we need to figure out what we mean by Security. We will pull from the worlds of Security Engineering and Software Security to lay the foundation for technical approaches to protecting our web resources. We will also discuss the assault on encryption, web security features and emerging technologies that will hopefully help strengthen our ability to protect what we hold dear.

Session #40: An Engineering Team Where Everyone is a Leader by Kate Wardin
Building a strong engineering culture can be a daunting, but very rewarding undertaking. It requires all members of a team to develop leadership skills as they navigate a very dynamic and evolving industry.

12:30 - 3:00 PM: UBERCONF 2020 VIRTUAL - THURSDAY: BREAK #2
1:00 - 4:30 PM - Sessions
Session #41 : Archived by Mark Richards
Jorge Santayana is famous for saying "Those who cannot remember the past are condemned to repeat it". When SOA (Service-Oriented Architecture) was all the craze, everyone got all excited about services, but forgot about the data. This ended in disaster. History repeats itself, and here we are with Microservices, where everyone is excited about services, but once again, forgets all about the data. In this hands-on live virtual session I discuss some of the challenges associated with breaking apart monolithic databases, and then show several techniques for sharing and accessing data. I consider the data part of Microservices the hardest aspect of this architecture style. In the end, it's all about the data.

Session #42 : Java 9-15 by Christopher Judd
With the new Java release cadence of every 6 months, new Java capabilities are coming at us fast and furious. It is hard to keep up, so this hands-on workshop is designed quickly get you caught up.

Session #43 : Refactoring to Modern JavaScript Workshop by Raju Gandhi
JavaScript now has a yearly release cycle. Every release introduces new features that aim to make us (JavaScript developers) more productive, while making our code succinct, expressive, and (potentially) bug-free. By the end of this workshop you will be intimately familiar with the newer set of JavaScript features, and ready to dive into your next JavaScript project with confidence.

Session #44 : Rust + WebAssembly by Brian Sletten
Each of these technologies is transformative on its own. Together, they are a compelling mix of the speed of C++, the safety and portability of Java and a modern, expressive and readable syntax. Come learn why Rust and WebAssembly are two great technologies that are better together. This combination is going to impact your career whether you develop on the front end or the backend on the desktop or in the cloud.

Session #45 : Time is on my side! by Kate Wardin
Attending meetings, researching a new feature, writing support documentation, troubleshooting an annoying bug, responding to on call duties, and the growing email inbox; when do I find time to actually write code?

2:30 - 5:00 PM : UBERCONF 2020 VIRTUAL - THURSDAY: BREAK #3
3:00 - 6:30 PM - Sessions

Session #46 : Archived by Mark Richards
Once you break things apart into microservices, you must then put them back together. In other words, individual services still sometimes need to talk to one another to complete a given business transaction, whether that transaction is synchronous or asynchronous. In this hands-on live virtual session I talk about the various patterns of communication and workflow management within a microservices ecosystem.

Session #47 : Java 9-15 (continued) by Christopher Judd
With the new Java release cadence of every 6 months, new Java capabilities are coming at us fast and furious. It is hard to keep up, so this hands-on workshop is designed quickly get you caught up.

Session #48 : Refactoring to Modern JavaScript Workshop (continued) by Raju Gandhi
JavaScript now has a yearly release cycle. Every release introduces new features that aim to make us (JavaScript developers) more productive, while making our code succinct, expressive, and (potentially) bug-free. By the end of this workshop you will be intimately familiar with the newer set of JavaScript features, and ready to dive into your next JavaScript project with confidence.

Session #49 : Rust + WebAssembly (continued) by Brian Sletten
Each of these technologies is transformative on its own. Together, they are a compelling mix of the speed of C++, the safety and portability of Java and a modern, expressive and readable syntax. Come learn why Rust and WebAssembly are two great technologies that are better together. This combination is going to impact your career whether you develop on the front end or the backend on the desktop or in the cloud.

Session #50 : The Dao of a Career in Software by Kate Wardin
Do you feel inspired by conference talks but overwhelmed by all of the take aways to remember when you get back to work? This session will provide an opportunity to identify and practice key leadership skills immediately!

4:30 - 7:00 PM : UBERCONF 2020 VIRTUAL - THURSDAY: BREAK #4
5:00 - 8:30 PM - Sessions
Session #51: Microservices and Domain-Driven Design — The strategic parts by Raju Gandhi
We live in a world of microservices. Yet, what is a microservice? What defines the boundaries of a microservice? How do we define the relationships between microservices? Thankfully domain-driven design gives us the concepts and practices to better design and decompose our services.

Session #52: Container Tools: The Next Generation by Laine Minor and Josh Smith
CRI-O and Buildah and Podman, OH MY. (….and Skopeo, and what on Earth happened with Docker, and…….) Containers are really cool, and also useful. Everyone knows it! The open source community has rallied around them and are constantly making improvements and tweaks to their capabilities. But….the tools generated by those open source communities are constantly evolving, and it ends up really hard to keep up on what does what and…why you should care.

Session #53: Key Gradle Concepts And Practices by Kenneth Kousen
Gradle has been described as the open source project with the most documentation that doesn't help. Key concepts, like the different steps Gradle takes at initialization time, configuration time, and execution time are not obvious, but must be understood to use Gradle effectively. This talk will cover those topics, as well as how to use source sets, IDE integration, testing in parallel, the build cache, and multi-project builds.

Session #54: Twelve Ways to Make Code Suck Less by Venkat Subramaniam
We all have seen our share of bad code and some really good code as well. What are some of the common anti patterns that seem to be recurring over and over in code that sucks? By learning about these code smells and avoiding them, we can greatly help make our code better.

Session #55: VDD: Value Driven Development - 10 Golden Rules for incremental Greatness by Michael Carducci
On the NFJS tour, there are questions that seem to come up again and again. One common example is "How do we determine which new tools and technologies we should focus our energy on learning?" another is "How do we stop management from forcing us to cut corners on every release so we can create better and more maintainable code?" which, after awhile becomes "How can we best convince management we need to rewrite the business application?" There is a single meta-answer to all these questions and many others.

Friday, Jul. 17

8:00 - 11:00 AM: UBERCONF 2020 VIRTUAL: EXPERT PANEL DISCUSSION II
9:00 - 12:30 PM - Sessions

Session #56: Domain-Driven Design - Where Rubber meets the road by Raju Gandhi
In this session we will go further with DDD, considering aspects like aggregates, domain events, factories and repositories, and consider how DDD can be represented in architecture, be that hexagonal, REST or RPC.

Session #57: Latest Java Best Practices by Kenneth Kousen
Java is now on a six-month release schedule, with new features being added all the time. This talk summarizes the features that have been added to Java, including modules, jshell, collection factory methods, private methods in interfaces, new annotations and more. The goal is to show not only what has been added, but why and where to use them.

Session #58: Kafka as a Platform: the Ecosystem from the Ground Up by Tim Berglund
Kafka has become a key data infrastructure technology, and we all have at least a vague sense that it is a messaging system, but what else is it? How can an overgrown message bus be getting this much buzz? Well, because Kafka is merely the center of a rich streaming data platform that invites detailed exploration.

Session #59: Kubernetes Koncepts by Jonathan Johnson
You have some modular code with a REST API. You are on your way to Microservices. Next, you package it in a container image that others can run. Simple. Now what? Your service needs to log information, needs to scale and load balance between its clones. Your service needs environment and metadata way outside its context. What about where the service will run? Who starts it? What monitors its health? What about antifragility? Updates? Networking? Oh my. Don't get flustered. We will explore how Kubernetes simplifies the complexity of distributed computing.
Session #60 : How to Technology Good - Tips for Implementation at Scale by Josh Smith and Laine Minor
Want to bring in [new cool thing X] or [necessary technology change Y] to your company, because you know there's a need for it? GOOD IDEA! Except...now what? If your company is more than about 3 people, how do you explain, enable, and encourage the adoption of this change, especially if it will require some work on everyone's part?

10:30 - 1:00 PM : UBERCONF 2020 VIRTUAL - FRIDAY: BREAK #1

11:00 - 2:30 PM - Sessions

Session #61 : Terraform-ing your cloud by Raju Gandhi
A large part of embracing DevOps involves embracing automation. Over the last decade we have seen the emergence of "as Code" — Build-as-Code, Configuration-as-Code and Infrastructure-as-Code. The benefits to utilizing such tools are huge! We can codify the state of the world around our applications, giving us the ability to treat everything that our code needs like we treat the code itself. Version control, release management, tagging, even rolling backs are now possible. Terraform, an open-source tool from HashiCorp allows us to build, control and modify our infrastructure. Terraform exposes a Domain-specific language (DSL) that we can use to express what our infrastructure should look like. Terraform can work with all the major cloud providers, including Amazon AWS, Google GCP and Microsoft Azure. If you are curious about what this tool has to offer, this session is for you. Come on in, and let's learn how to terraform your cloud.

Session #62 : Java Testing Skills with JUnit 5, Mockito 3, and More by Kenneth Kousen
The fundamental testing libraries in Java have undergone complete redesigns in the past few years. JUnit 5 redesigns the most well-known tool in all of testing. The most popular mocking library, Mockito, has also been rebuilt. This talk will demonstrate the new features, how they are intended to be used, and discuss experimental ideas in the pipeline.

Session #63 : Dissolving the Problem: Kafka is more ACID Than Your Database by Tim Berglund
It has become a truism in the past decade that building systems at scale, using non-relational databases, requires giving up on the transactional guarantees afforded by the relational databases of yore, ACID transactional semantics are fine, but we all know you can't have them all in a distributed system. Or can we?

Session #64 : Kubernetes Koncepts (continued) by Jonathan Johnson
Prerequisite: If you are unfamiliar with Kubernetes be sure to attend: Kubernetes Koncepts (1 of 2) Aha moments with apps in containers can be quite liberating. The mobile space is saturated with "there's an app for that". For us, we now expect "there's a container for that". "Write once, run anywhere" (WORA) has changed to "Package once, run anywhere" (PORA). The growing community of containers is riding up the hype curve. We will look at many ways to assemble pods using architecture patterns you already know.

Session #65 : Solving Development Pain - What Hurts and Why it Matters by Josh Smith and Laine Minor
There is pain inherent in development - monoliths, confusing deployment processes, conflict between dev/ops/business. IT is hard and the pace of change now makes it even more difficult.

12:30 - 3:00 PM : UBERCONF 2020 VIRTUAL - FRIDAY: BREAK #2

1:00 - 4:30 PM - Sessions

Session #66 : Composing your containerized microservices by Raju Gandhi
Docker compose has been a part of the docker ecosystem since the beginning. It allows us to "stitch" together our services so that we can deploy all our services and related infrastructure using the "one" button. Furthermore, we can now use docker-compose to target Kubernetes, exemplifying the role that docker compose has to play in our day to day interaction with Docker.

Session #67 : Kotlin Workshop by Kenneth Kousen
Learn the basic syntax and semantics for the Kotlin programming language. Kotlin is an alternative JVM language that provides null safety, static typing, and powerful IDE support. This workshop will give you the chance to code in Kotlin, highlighting its similarities and differences from Java, how to use functional programming skills, work with collections, access restful web services, and more.

Session #68 : The Database is Only Half Done: ksqlDB and Streaming Applications by Tim Berglund
In a world increasingly defined in software, is the database—a tool primarily built to aid human-computer interaction—always the right tool to choose? In this talk, we'll look at a new type of database, built not only for the tables and columns we're familiar with, but also the continuous, never-ending "streams of events" that represent data as it moves. We'll take a look at ksqlDB's syntax and show how it can replace bespoke Kafka Consumers with short, declarative queries.
Session #69 : Distilling Java Containers by Jonathan Johnson
Three evolutionary ecosystems work well together: Java, Containers, and Kubernetes. Past versions of Java were never designed to be "container aware". This has led some to stray away from the JVM and consider other shiny languages. But wait, before you go, let's discover what Java 9, 10, 11, 12, 13 (...) has done to get our applications into efficiently distilled containers that pack nicely into Kubernetes.

Session #70 : The Business Agility Treasure Map: Charting a Course to Continuous Delivery by Laine Minor and Josh Smith
All companies are IT companies. Except...not. All companies SHOULD be IT companies, if they're trying to keep up with the weight of their customers' ever-increasing demands for speed and agility. Unfortunately...most companies don't know how to get there - or even what "there" looks like, or how they'd describe it.

2:30 - 5:00 PM : UBERCONF 2020 VIRTUAL - FRIDAY: BREAK #3

3:00 - 6:30 PM - Sessions

Session #71 : Container Usage Patterns by Raju Gandhi
Embraced containers yet? If so, that only presents the beginning of the journey. Designing your images to be lean, and your containers configurable requires us to leverage Dockerfiles to their maximum potential. At scale, everything matters—build times, testing, multi-stage builds, conventions around tagging and logging. There is a whole ecosystem of tools around how we can best build our images and containers.

Session #72 : Kotlin Workshop (continued) by Kenneth Kousen
Learn the basic syntax and semantics for the Kotlin programming language. Kotlin is an alternative JVM language that provides null safety, static typing, and powerful IDE support. This workshop will give you the chance to code in Kotlin, highlighting its similarities and differences from Java, how to use functional programming skills, work with collections, access restful web services, and more.

Session #73 : Events, Dear Boy, Events by Tim Berglund
Harold McMillan was Prime Minister of England from 1957 to 1963, the last British PM born during Queen Victoria’s rule, and one whose wit and even-keeled nature defined his administration. When asked by a reporter what might force his government off the course he had firmly laid out for it, he allegedly replied “Events, dear boy, events.” The same might be said about what is driving software architectures today. Event-driven systems have enabled organizations to build substantial microservices ecosystems with all of the decoupling and evolvability that we were promised by the distributed computing technologies of 20 years ago. But these systems raise some interesting questions: if events now rule, what has become of entities? If we store events in logs, do we still need databases? Can we merely produce immutable events to trivially scalable logs and loose our microservices to consume them with no regard for what is actually out there in the world?

Session #74 : Konsumer Driven Kontrakts by Jonathan Johnson
Prerequisite: If you are unfamiliar with Kubernetes be sure to attend: Kubernetes Koncepts At the 2009 Agile conference, J.B.Rainsberger declared “Integration tests are a scam”. I agree. Come see some compelling reasons why consumer-driven contract testing is a much better approach. Particularly for microservices. We will explore different testing techniques on Kubernetes, including an important one called "Consumer-Driven Contracts".

Session #75 : The Art of the Impossible by Michael Carducci
We all have an innate sense of what's possible. Not only is this how magicians fool you, but it might also be what's holding you back. In this session Michael Carducci shares how he applied lessons learned in his career as a professional magician to his "day-job" as a software engineer.

4:30 - 6:45 PM : UBERCONF 2020 VIRTUAL: VIRTUAL MAGIC SHOW WITH MICHAEL CARDUCCI