



October 3th and 4th, 2023





### MARK RICHARDS

Co-author of "Fundamentals of Software Architecture" and "Software Architecture:

The Hard Parts"

#### **Briefly introduce yourself**

My name is Mark Richards. I am the founder of the website developer2architect.com, and also an author and hands-on software architect having just recently written with my friend Neal Ford "The Fundamentals of software architecture" and also "Software Architecture: the hards Parts."

## What can you say about GSAS this year?

It's wonderful to be here again at the Global Software Architecture Summit. It's been a long three years, but what I've found is that GSAS has grown tremendously. There 's such energy and such a great crowd this year and I am so happy to be back in person speaking at this conference.

# What are the key software architecture insights you could share with GSAS attendees?

Some of the key takeaways that I have seen so far are all about the theme of the conference this year, which is about software architecture metrics and the importance of testing software architecture. Having that observability makes sure that our architectures remain structurally sound and have high levels of integrity.

## What software architecture metrics do you normally use?

Some of my favorite metrics happen to be those that are important to the business. Rather than always focusing on something like performance, I focus on those things that are critical to the success of the business and measure those kinds of metrics.





### NATHANIEL SCHUTTA

Software Architect and author of the book "Thinking Architecturally"

### **Briefly introduce yourself**

My name is Nate Schutta. The best way to describe me is as an architect as a service because I get to go places and talk to people about architecture. Now, I will admit the first time someone called me that I did sound the acronym out in my head and realized it might not have been a compliment but I try to take it in the best light I possibly can since everything is as a service these days.

## What can you say about GSAS this year?

I am so happy to be here in one of my alltime favorite cities, Barcelona, with hundreds of other very interesting architects. It's just a really awesome opportunity to get people together to talk about architecture, how we do this better, and how we grow this space. I am really happy to be here at the event, a lot of fun, a great city, an awesome environment, and great weather.

## What software architecture metrics do you normally use?

In terms of software metrics, I know that's something we think a lot about. I am a big fan of fitness functions, this is something I learned from Neal Ford in sort of how we test architecture to make sure that it still does what we need it to do. We put all this time and effort into coming up with these well-thought-out architectures, but we don't think a lot about how we actually maintain that architecture over time as we inevitably refactor, add new features, and change things.

The thing that I love about fitness functions is that it helps us make sure that we are adhering to

those important principles that we identified as architects early on. That's the kind of stuff that I am really excited about, and I am just delighted to be here in this amazing city with hundreds of dedicated architects that are trying to get better at the craft.





## CAROLA LILIENTHAL

Author of "Sustainable Software Architecture: Analyze and Reduce Technical Debt" and Co-author of "Software Architecture Metrics"

#### **Briefly introduce yourself**

My name is Carola Lilienthal and I am from Hamburg Germany. I am currently a Software Architect working as the manager of my own company (WPS - Workplace Solutions) in which we are a team of 140 developers divided into 10 teams that create wonderful software for our clients.

## What can you say about GSAS this year?

It is my first time attending the event, but it's the second time it's done, and it's really wonderful that it's in Barcelona, which is a wonderful city. I already have seen like 400 hundred people sitting in the big room talking. I have also had the chance to talk with people from all over the world. It's really great if you want to connect in Europe and all over the world.

# What are the key software architecture insights you could share with GSAS attendees?

My giveaway for any architect I have met in the world is "do it as simple as possible." This is our job. Our job is to create simple architecture because the other people, the programmers that come behind us, have to deal with our legacy. They need something they can understand, so it has to be simple.

## What software architecture metrics do you normally use?

My chapter in the book is about my most loved metrics. It's called the Modularity Maturity Metric. What we do here is that we calculate one metric between zero and ten for the whole system out of many little other metrics to really describe if a system is well done from a point of modularity because this is the most important thing in architecture. You need small bits and pieces and bigger bits and pieces with high coercion in them and with low coupling between each other.





### MICHAEL KEELING

Author of "Design It!: From Programmer to Software Architect"

#### **Briefly introduce yourself**

My name is Michael Keeling and I am a senior staff software engineer at Kiavi, a Fintech company based out of Pittsburgh and San Francisco in the US.

## What can you say about GSAS this year?

My favorite thing about the Global Software Architecture Summit this year is getting to see everybody in person. We are in the middle of a workshop right now, this would be the first time running a face-to-face workshop with everyone, and it's so amazing seeing everyone work together in small groups, and getting to ask and answer questions. I didn't realize how much I missed that.

# What are the key software architecture insights you could share?

In the workshop that we are doing right now at the conference, something that has come up a few times, kind of generic advice but also important is that there's really no one-size-fits-all answer to all design problems.

Sometimes, the solution that works great on one team may not be the right fit in your context, and figuring that out is hard. And it's okay that it's hard because software design is challenging but if we work together, we can achieve really awesome things.

## What software architecture metrics do you normally use?

The ones that are in our observability platform so really it's focused on runtime quality attributes, availability metrics, performance, and looking at the scale. Performance is a big one for us recently seeing what our throughput and load are on the different web services that we have. There are a lot of metrics I wish we would use more, having to do with the design time measures, so questions that I am curious about are: how well is the software serving the team or how quickly are we able to introduce meaningful changes to the architecture?





### MICHAEL FEATHERS

Software Architect and author of "Working Effectively with Legacy Code"

#### **Briefly introduce yourself**

My name is Michael Feathers and I work as a Chief Software Architect of Globant and also as a Director of R7K Research & Conveyance, a company specializing in software and organization design.

# What are the key software architecture insights you could share?

In terms of things that are generally useful insights within architectures, I think business transparency is extremely valuable within the context of organizations developing architectures. Quite often we hide in the technical space within our organizations and the degree to which we're able to go and present novel views of the system that articulate the needs of the system and also act as champions of the system within the organization we're really better off.

## What can you say about GSAS this year?

The Global Software Architecture Summit this year has been wonderful. Lots of highlevel content as well as novel content. Good things you want to put in front of the industry and a lot of engaging conversations. I love that.

## What software architecture metrics do you normally use?

In terms of architecture metrics, I haven't really been in the architecture metrics space all that much. For the most part what I really like is Binary metrics, where you talk about the presence or absence of particular qualities in different areas of systems. I think it's nice to basically have guardrails about what belongs in one particular area of the system and what doesn 't. Once you have that, a lot of things tend to go much better.





### ALEXANDER VON ZITZEWITZ

Founder and CEO of hello2morrow

#### **Briefly introduce yourself**

My name is Alexander von Zitzewitz, I am the founder and CEO of hello2morrow, a company with a focus on creating tools for static analysis for metrics and architecture.

## What can you say about GSAS this year?

It's a very lovely place. I love Barcelona, the event, the organization, and the way it's performed. It's also a very nice crowd, so I would highly recommend this event to anyone who's working in the software architecture space.

# What are the key software architecture insights you could share?

The most important thing to know if you don't know anything about metrics and software architecture you get the big ball of mud for free. Basically, if you don't integrate metrics into your process, chances are that you will end up as a big ball of mud with lots of trouble.

## What software architecture metrics do you normally use?

We like to use maintainability level. That is a metric we developed to measure the maintainability of a code base. We can also use classics such as propagation cost and relative cyclicity. I believe it's important to measure cyclic dependencies because they are the main cause of a lot of travel and software systems. You get more and more cyclic dependencies taking over a system.

# Can you briefly comment on your Software Architecture metrics book chapter?

My chapter focuses on very technical metrics that measure coupling in the software system complexity. I think coupling and complexity are the main enemies of maintainable software and this chapter focuses very much on those technical metrics that look at dependency structures, cyclical dependencies, and erosion of architecture. They are very good early warning metrics when it comes to trying to stop the big ball of mud from happening.





### **JOAO ROSA**

Strategic Software Delivery
Consultant at Xebia & Co-author of
"Software Architecture Metrics"

#### **Briefly introduce yourself**

My name is Joao Rosa and I am an independent consultant focusing on helping organizations evolving their software architecture and their social systems.

## What can you say about GSAS this year?

This is the first edition that I joined, but I am really liking the event so far. The content goes into very interesting areas that I think are relevant for the modern-day software architect.

# What are the key software architecture insights you could share?

I would like to share with attendees a couple of insights, also coming from the areas that I am interested in. The main one is that any evolution in your software architecture landscape will influence the way that your teams relate to each other, or even if you need more or fewer teams.

## What software architecture metrics do you normally use?

It's a great question! Since I operate between software architecture and social systems I tend to use some of the metrics that pop up in the Dora report and the accelerate book, but I always connect to the social part. Do you have lots of attrition? How do people view the systems that they work with? There are more insights in those questions.

# Can you briefly comment on your Software Architecture metrics book chapter?

It was fun being invited to that project and writing a book chapter. I try to share my point of view from a systemic approach. If we look at the company as a system, containing people and technical systems, how can they coevolve together: what are the types of decisions that you can make? How do you connect metrics to KPIs and the business areas in which the company operates?