

Building Scalable Cloud Service

Session Speaker:

Susan Diamond

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Biography:

Susan Diamond is a highly accomplished engineering leader with a strong track record in the development of secure and scalable cloud platforms. She currently holds the position of Senior Engineering Leader at Twilio Inc. since 2022, where she has taken the lead on numerous cloud platform initiatives hosted on AWS. Notable projects include the Flex calling center platform and the Studio communication platform orchestration engine. Prior to her role at Twilio, Susan served as a Senior Technical Staff Member at IBM for an impressive two-decade span, from 2001 to 2022. During her tenure at IBM, she demonstrated exceptional leadership by building and guiding high-performance global teams. She played a pivotal role in driving various cross-organizational initiatives in the cloud and artificial intelligence domains, spanning SaaS, PaaS and IaaS layers. Some of her notable contributions include the development of the Watson core cognitive platform, the introduction of Deep Learning as a Service platform, and building the Watson foundation cloud platform ground up.

Susan is renowned for her consistent and efficient delivery of high-quality results. She has shared her insights and expertise at multiple STEM conferences, contributing to the broader community's knowledge base. Her areas of specialization encompass cloud architecture, machine learning infrastructure, micro-service architecture, and distributed system management.

In recognition of her innovative work, Susan Diamond holds six patents and has published over ten inventions in her field. She holds advanced degrees in both business

administration and computer science, underscoring her commitment to a multifaceted approach to leadership and technology.

Abstract:

Expanding a business rapidly in the public cloud presents a unique set of challenges that require scaling up not only the engineering team but also the cloud services and DevOps processes and tooling. When faced with the task of accommodating a 10X increase in traffic within a tight timeframe of 6 months, we encountered several critical issues and devised solutions to overcome them. In this talk, I will delve into our journey of growth and the valuable lessons we learned along the way.

Our journey of rapid growth in the public cloud was challenging, but by addressing these issues and learning from our experiences, we successfully revamped our product to support 10X traffic in just six months. I hope that sharing our experiences and lessons will benefit others facing similar growth pains in their cloud journey.