Reimagining Self-Adaptation in the Age of Large Language Models

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What happened with **Ticketmaster** and **Taylor Swift's Eras Tour**?

Verified Fans system

3.5 million

unprecedented traffic

servers were "unable to answer"

long waits

crashed in an hour

poor customer service

Self Adaptive Systems try to prevent this from happening

An LLM based paradigm shows immense potential
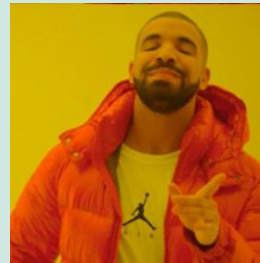
Rule based

RL policies

ML

Large language Models

MSE - K

Self Adaptive Systems try to prevent this from happening
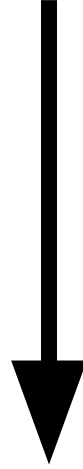
An LLM based paradigm shows immense potential

Complex Algorithms

Data requirements
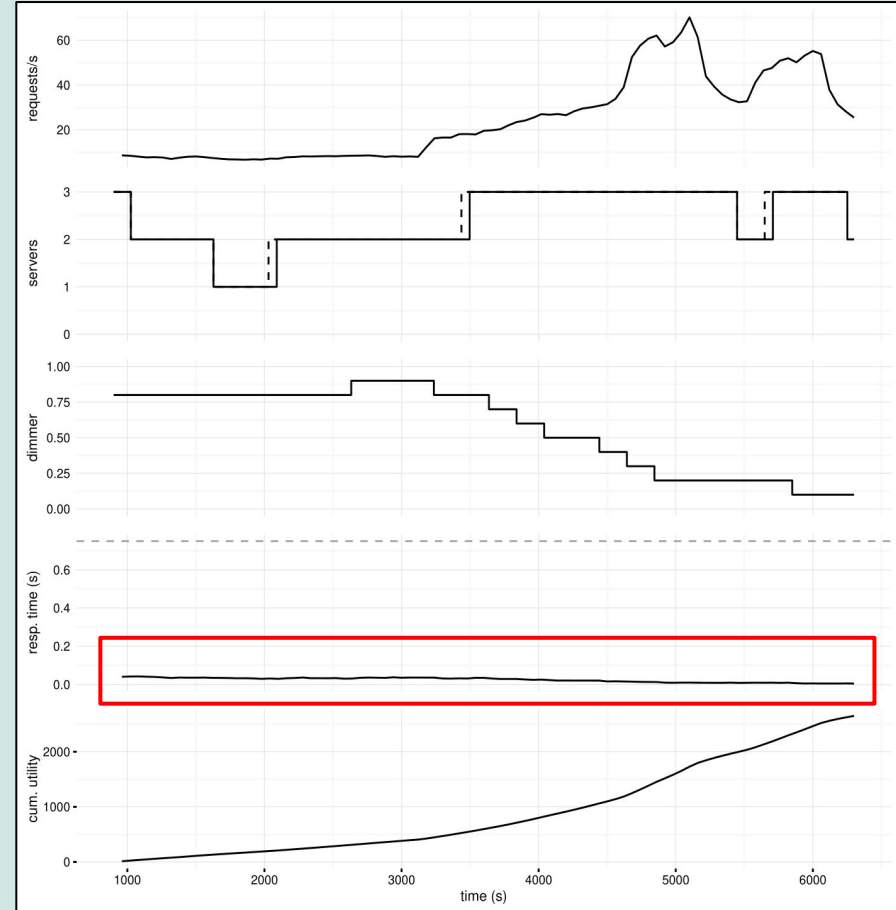
Fast Prototyping /Deployment

Generalizable

Monitor **Analyze Plan** Execute - Knowledge

Monitor **Synthesize** Execute - Knowledge

Objective: keep the response time as low as possible

Stable response times below 0.1 seconds, even with varying workloads

Thank You!

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