

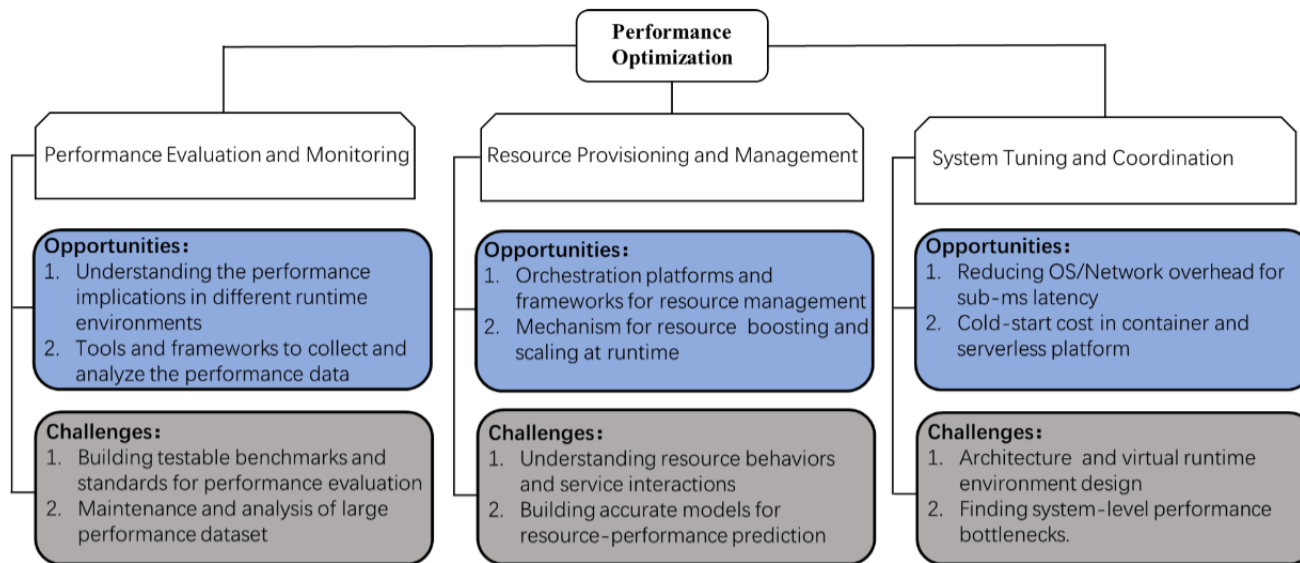
# Performance Optimization for Cloud Computing Systems in the Microservice Era: State-of-the-Art and Research Opportunities

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# Problems & Ideas

- Problems of performance optimization for cloud microservices:
  - Datacenters have grown in heterogeneity and disaggregation at the infrastructure layer .
  - Microservice-based applications have complex runtime dynamics.
- Ideas: We provide an overview of existing works on recent system performance optimization techniques for microservices.



Different performance optimization techniques for microservices.

# Main Contributions

- Contributions:
  - We investigate key design considerations of microservice applications in the cloud.
  - We summarize representative performance optimization techniques for microservice.
  - We identify the open issues that need to be addressed for microservice.

