

## Contact

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## Top Skills

DevOps  
Cloud Applications  
Docker

## Honors-Awards

IBM Corporate Award for IBM Workload Deployer Technologies  
Outstanding Technical Achievement Award for Middleware Virtualization Technologies

## Publications

CPU demand for web serving: Measurement analysis and dynamic estimation  
Sieve Email Filtering: Extension for Notifications  
Workload orchestration and optimization for software defined environments  
Sieve Email Filtering: Relational Extension

## Patents

Integrated virtual infrastructure system  
Controlling workload of a computer system through only external monitoring  
Dynamically building a set of compute nodes to host the user's workload  
Methods and apparatus for discovering data providers satisfying provider queries

# Wolfgang Segmuller

Senior Cloud Architect at State Street Technology Research  
New York City Metropolitan Area

## Summary

I led the testing architecture of an OpenStack cloud. Implemented chaos and performance testing and automation for repeatable testing.

I led DevOps education at Research, with 95% of participants would recommend to others. I led security and DevOps development of a service, enabling code check-in to production within 2 hours.

I performed security reviews that found numerous security issues which were then addressed by the development team.

I led architecture, design, and implementation of hypervisor communications, in Java and Groovy in IBM Workload Deployer, released as a product. I received an IBM Corporate Award for this work.

I led the design and implementation of a work profiler, in Java. This helped schedule traffic to backend web servers to prevent overloading the servers.

I created a Bridge scoring application using SPA and server written in Scala. This was well received by my bridge group. <https://github.com/thebridsk/bridgescorer>

### Skills:

Process: Agile, DevOps

Operating Systems: Windows, Linux

Languages: Java, Scala, Python, C, C++, HTML, CSS, JavaScript

Technologies: GraphQL, Facebook React, Swagger

Automation: Jenkins, Travis CI, Terraform, Ansible

Runtime: Docker, Kubernetes, VMWare, AWS, IBM Cloud, OpenStack

Test: TDD, BDD, Behave, PyUnit, JUnit, ScalaTest

Planning: GitHub, ZenHub

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## Experience

### State Street Technology Research

#### Senior Cloud Architect

2018 - Present (5 years)

Greater New York City Area

### IBM Research

#### Senior Software Engineering, DevOps

2014 - 2018 (4 years)

Greater New York City Area

- Architected, designed and implemented a service based on microservices using Agile and DevOps principles and practices written in Python.
- Led the DevOps and Security for the team.
- With the pipeline I developed we were able to deploy to production within 2 hours of making a code change.
- Led the technical team and taught DevOps to research teams.
- Created bootcamps, weekly seminars and provided consultation services. 95% of the bootcamp participants would recommend the bootcamp to others.

### IBM Research

#### Senior Software Engineering, Cloud Systems

2010 - 2013 (3 years)

Greater New York City Area

- Architected, designed, and implemented of the VMSupport layer for monitoring and manipulating hypervisors. This was released in IBM Workload Deployer. Received an IBM Corporate Award for this work.

### IBM Research

#### Senior Software Engineering, Application Server

2004 - 2009 (5 years)

Greater New York City Area

- Designed and implemented a work profiler, in Java, for measuring resource usage per request, this was used to prevent overloading of backend application servers.

- Developed a log analysis tool verifying proper operation of work profiler.

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## Education

Rensselaer Polytechnic Institute

Bachelor's degree, Computer Science, Chemistry