# Presentation Title
## Optional Subtitle

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NCIE, 2015

# Outline

# Service Oriented Architecture & Web Services

- A software architectural style for simple and standard way of communication between software agents
- Both the service provider and the consumer will be software agents.
- Web services are the common form of SOA and has been widely deployed in the Internet.
- Testing Web Service has become important for checking the robustness, reliability, availability and other features.
- Features of Web services to be tested
    - Discovery of web service (WSDL).
    - Publish and find.
    - SOAP message.
    - Bind capabilities.

# SOAP Bundling Framework

- A functionality testing approach
- A SOAP message bundling framework which enables bundling multiple messages into one message is proposed.
- Application developers do not have to consider the service granularity for performance reasons
- The actual messages will be bundled by the framework at run time
- The implementation of the framework is done using the Apache-Axis SOAP engine and Google SOAP API is used as target service.
- On the service-requester side, the Java interface generated from the original WSDL is the same as the providers

# Perturbation Testing

- Based on data perturbation
- New operators are introduced to extend the operators for enlarging the probability to reveal faults
- The SOAP message is directly modified by these operators.
- SMATWS tool, is created for the evaluation of the perturbation methods.

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- Fourth item.
- Fifth item. Extra text in the fifth item.

# Blocks

## Block Title

You can also highlight sections of your presentation in a block, with it's own title

## Theorem

*There are separate environments for theorems, examples, definitions and proofs.*

## Example

Here is an example of an example block.

# Summary

- The first main message of your talk in one or two lines.
- The second main message of your talk in one or two lines.
- Perhaps a third message, but not more than that.

- Outlook
    - Something you haven't solved.
    - Something else you haven't solved.

# For Further Reading I

📕 A. Author.
*Handbook of Everything.*
Some Press, 1990.

📄 S. Someone.
On this and that.
*Journal of This and That,* 2(1):50–100, 2000.