

Architecting System Performance; Course Material

by *Gerrit Muller* [TNO-ESI, University of South-Eastern Norway]

e-mail: `gaudisite@gmail.com`

`www.gaudisite.nl`

Abstract

Listing the course material for Architecting System Performance

Distribution

This article or presentation is written as part of the Gaudí project. The Gaudí project philosophy is to improve by obtaining frequent feedback. Frequent feedback is pursued by an open creation process. This document is published as intermediate or nearly mature version to get feedback. Further distribution is allowed as long as the document remains complete and unchanged.

August 16, 2025
status: planned
version: 0.1

logo
TBD

The ASP™ course is partially derived from the EXARCH course developed at *Philips CTT* by *Ton Kostelijk* and *Gerrit Muller*.

Extensions and additional slides have been developed at *ESI* by *Teun Hendriks*, *Roland Mathijssen* and *Gerrit Muller*.

Elevator: Hands-on Intro to Performance Modeling

core

Physical Models of an Elevator

<http://www.gaudisite.nl/info/ElevatorPhysicalModel.info.html>

optional

Teaching conceptual modeling at multiple system levels using multiple views

http://www.gaudisite.nl/CIRP2014_Muller_TeachingConceptualModeling.pdf

Understanding the human factor by making understandable visualizations

<http://www.gaudisite.nl/info/UnderstandingHumanFactorVisualizations.info.html>

core

Architecting System Performance; Course Didactics

<http://www.gaudisite.nl/info/ASPcourseDidactics.info.html>

optional

DSRP: <https://en.wikipedia.org/wiki/DSRP>

Assumptions: “Systems Engineering and Critical Reflection: The Application of Brookfield and Goffman to the Common Experiences of Systems Engineers” by Chucks Madhav; proceedings of INCOSE 2016, in Edinburgh, GB

70/20/10:

<http://charles-jennings.blogspot.nl/>

<https://www.trainingindustry.com/wiki/entries/the-702010-model-for-learning-and-development.aspx>

<http://jarche.com/2015/11/the-bridge-from-education-to-experience/>

Reflection: “The Reflective Practitioner: How Professionals Think In Action” by Donald Schon, ISBN-10: 0465068782, Basic Books USA

Assumptions and beliefs:

<https://pivotalthinking.wordpress.com/tag/ladder-of-inference/>

<http://stwj.systemswiki.org/?p=1120>

Greedy and Lazy Patterns

core

Architecting System Performance; Greedy and Lazy Patterns

<http://gaudisite.nl/info/ASPgreedyAndLazy.info.html>

optional

Fundamentals of Technology

<http://gaudisite.nl/MAfundamentalsOfTechnologyPaper.pdf>

core

Architecting System Performance; Measuring

<http://www.gaudisite.nl/info/ASPmeasuring.info.html>

optional

Performance Method Fundamentals

<http://www.gaudisite.nl/PerformanceMethodFundamentalsPaper.pdf>

Measurement issues; From gathering numbers to gathering knowledge by Ton Kostelijk <http://www.gaudisite.nl/MeasurementExecArchSlides.pdf>

Modeling and Analysis: Measuring

<http://www.gaudisite.nl/MameasuringPaper.pdf>

Exploring an existing code base: measurements and instrumentation

<http://www.gaudisite.nl/info/ExploringByMeasuringInstrumenting.info.html>