Architecting System Performance; Course Material

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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.

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logo TBD The ASPTM 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



Course Didactics

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



Measuring

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

