S.E.R.T. Software Engineering ReThought

Conference 2024

BTH SERL Sweden
LEADING SOFTWARE ENGINEERING

S.E.R.T
reThink·reThought

www.rethought.se

SERL
Software Engineering Research Lab

HRENCO

MaxKompetens

redeploy insight

TOLPAGORNI
product management

SONY

Spotify

FORTNOX
Småföretagens bästa vän

Welcome to the S.E.R.T conference 2024!

S.E.R.T
reThink·reThought

ERICSSON

itestra
be excellent

QESTIT

TimePeopleGroup

VOLVO

Volvo Construction
Equipment

Synteda

Handelsbanken

Swedbank

fortiss

Mobile Financial Services

Knowledge Foundation

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→ Applied (tillämpad!) research with **partners**
→ SERL@BTH Ranked no. 1 in EU (2nd in the world) in empirical software engineering research
→ Largest applied research group in Software Engineering in SWE

serlsweden.se

S.E.R.T
reThink • reThought

KKS Profile project

Start: 2018-10, End: 2027-12

120MSEK budget approximately

16 company partners

Take on the *next generation challenges* partner companies face when developing software-intensive products and services (SIPS)
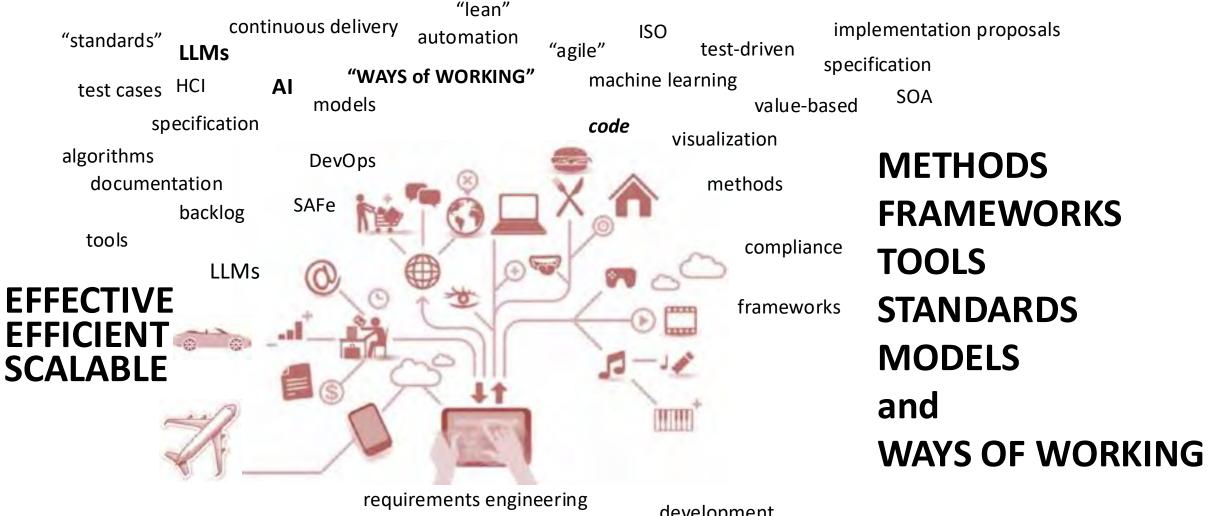
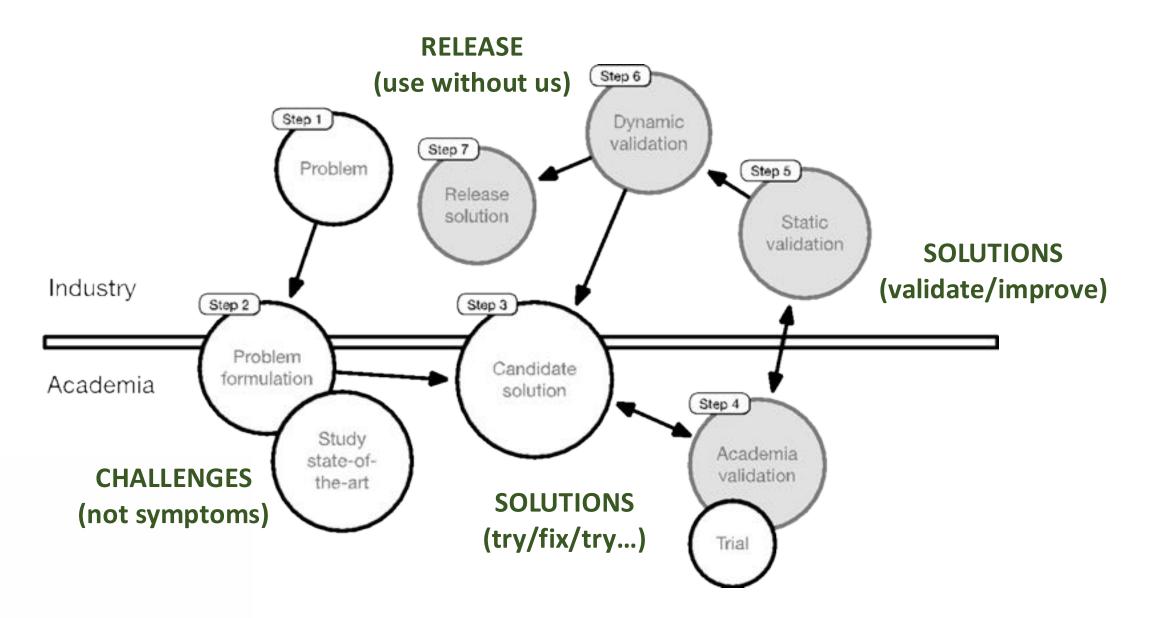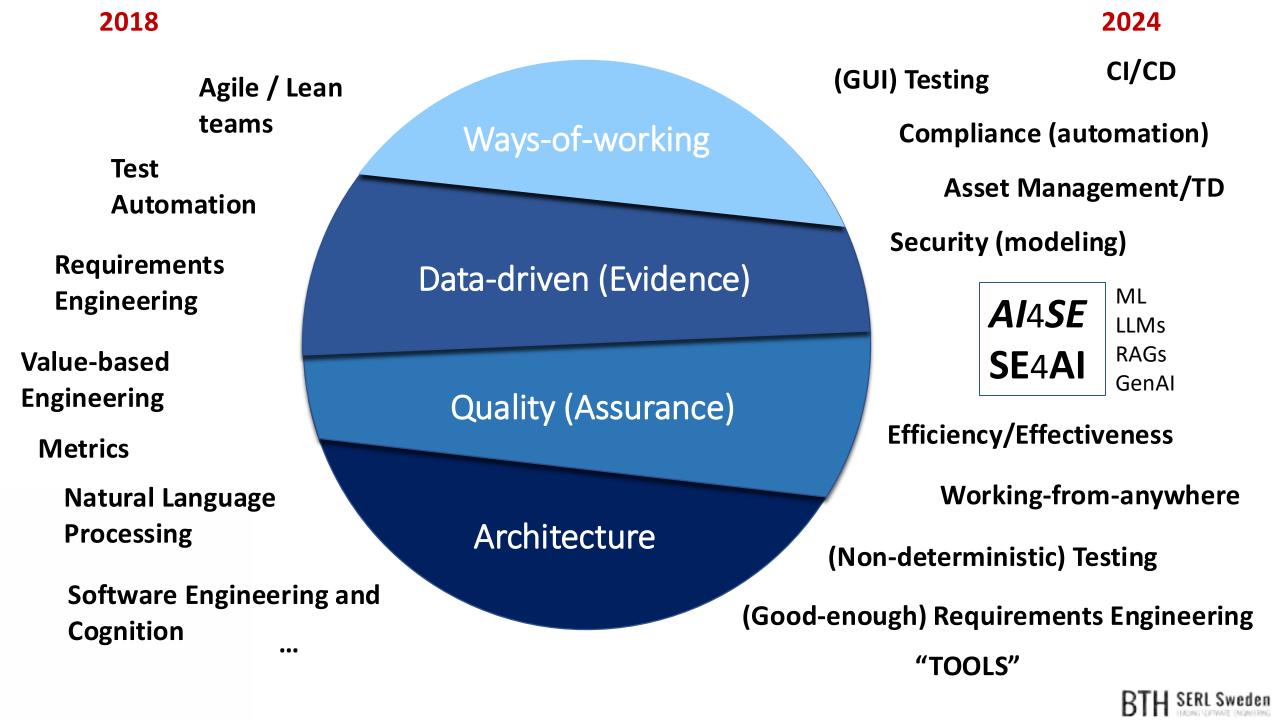*rethought.se*

"Software Engineering"

(what is)

"standards" continuous delivery "lean" automation ISO implementation proposals

LLMs "agile" test-driven specification

test cases HCI **AI** **"WAYS of WORKING"** machine learning SOA

specification models value-based **code** visualization

algorithms DevOps methods

documentation SAFe

backlog compliance

tools frameworks

LLMs

**EFFECTIVE
EFFICIENT
SCALABLE**

**METHODS
FRAMEWORKS
TOOLS
STANDARDS
MODELS
and
WAYS OF WORKING**

requirements engineering development

configuration portfolio architecture

verification & validation design **coding** business analysis

estimation integration technology analysis planning & leading

commissioning tendering & acquisition governance maintenance & evolution

human factors

how we work

the **S.E.R.T** project (evolution over the years)…

reThink ▪ reThought

2018

2024

Agile / Lean teams

(GUI) Testing

CI/CD

Test Automation

Compliance (automation)

Asset Management/TD

Requirements Engineering

Security (modeling)

Value-based Engineering

*AI*4*SE*
SE4AI

ML
LLMs
RAGs
GenAI

Metrics

Efficiency/Effectiveness

Natural Language Processing

Working-from-anywhere

(Non-deterministic) Testing

Software Engineering and Cognition

...

(Good-enough) Requirements Engineering

"TOOLS"

Ways-of-working

Data-driven (Evidence)

Quality (Assurance)

Architecture

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These two days are some examples and snap-shots of things we have - and are currently - working on!

S.E.R.T reThink·reThought **conference 2024!**

practicalities

(thanks to)

12th Floor

YOU ARE HERE

Ter... (...smoking!)

Lunch boxes will be here

Closed area

Area for lunch and coffee breaks

12th Floor Main stage

Elevators

Track 2 area

Track 1 area

Event Space

BTH SERL Sweden

(program)

Track 1: Remote and Hybrid Working	**Track 2: Cutting-Edge Software Engineering**
10:30-11:00 Joint Coffee break	
12:00-13:30 Joint Lunch	
14:40-15:10 Joint Coffee break	
END 16:30	END 16:30

...

18:00 Conference DINNER (sponsored by SERL/DIPT/BTH)

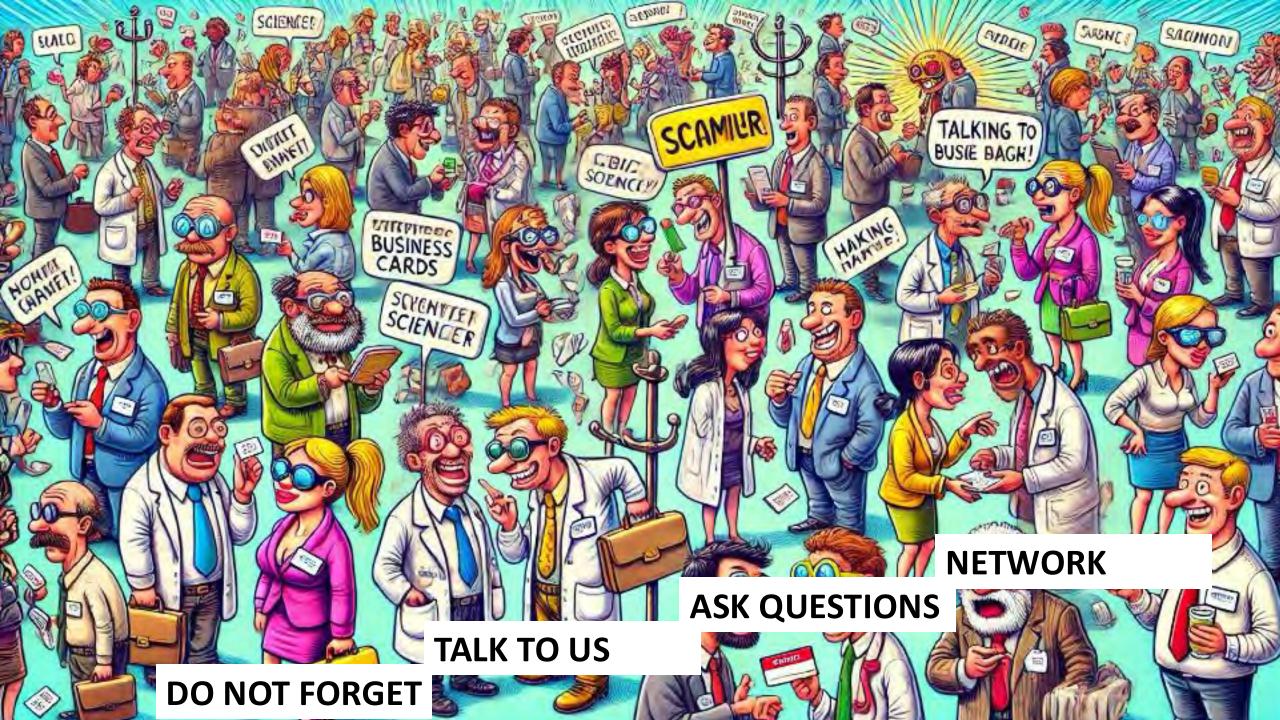BTH SERL Sweden
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(program)

TRACK 3: AI and LLMs in/for Software Engineering

Start 09:00

10:30-11:00 Coffee break

11:50-13:20 Lunch

14:40-15:10 Coffee break

END 16:00

Any questions/issues:

(will SERL team members please stand-up/raise their hands and wave ;)

(contact your HOST)

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Thank you

Thank you.

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... and please enjoy the talks and mingling/discussions