

Möjlig handledning inom datavetenskap 2016

Ralph-Johan Back (<http://users.abo.fi/backrj/>)

Matematik- och programmeringsundervisning
Refinement calculus och stegvis (incremental) programkonstruktion
+ Tillämpningar
Invariantbaserad programmering
Modellering av hybrida system
Gaudi software factory
Formella modeller för processer i levande celler

Ion Petre (<http://users.abo.fi/ipetre/>)

Computational methods in systems biology
in particular modeling of reaction networks, control-based approaches, methods for model
comparison, quantitative model refinement
Automata theory
Mathematical structures in computer science

Mats Aspås (<http://users.abo.fi/Mats.Aspnas/>)

Parallell programmering
Kodoptimering
Tillämpningar av parallell programmering

Linda Mannila (<http://users.abo.fi/lgrandel/>)

Undervisningsmetoder för programmering och algoritmiskt tänkande
Webbaserad undervisning
Könsroller inom IT-undervisningen

Luigia Petre (<http://users.abo.fi/lpetre/>)

Formal methods
Refinement-based methods for software development
Time- and space-dependent computing
Integration of formal methods
Network modeling and analysis
Smart electrical grids
Network-on-chip architectures
Wireless sensor-actor networks
Multi-core systems
Non-functional properties
Energy-aware computation
Network availability

Vladimir Rogojin (<http://www.vrogojin.net/>)

Graph-theoretic computational methods and tools
Analysis and simulation of cellular networks for predicting key genes and drug
targets related to oncogenic diseases

Patrick Sibelius

Logik
Matematikens grunder inom DV
Mönsterigenkänning

Annamari Soini (<http://users.abo.fi/soini/>)

Programmering
IT-undervisning
Könsroller inom IT
Sociala aspekter inom IT

Elena Troubitsyna (<http://users.abo.fi/Elena.Troubitsyna/>)

Formal modelling and verification methods
Design and verification of safety-critical systems
Development and verification of fault tolerant systems
Probabilistic verification
Integrated modelling approaches
Service-oriented development
System architecture

Marina Waldén (<http://users.abo.fi/marina.walden/>)

Formella metoder
Integration med industritillämpningar
Den formella utvecklingsprocessen
Agila metoder
Grafiska gränssnitt till FM (UML, Simulink)
Distribuerade system
Systemspecifikationer

Linas Laibinis (<http://users.abo.fi/Linas.Laibinis/>)

Mekanisering av formella metoder
Interaktiva omgivningar (verktyg) för bevis och formell programkonstruktion

Mats Neovius (<http://users.abo.fi/Mats.Neovius/>)

Modelling of context and context-awareness
Modellering av mätningssystem på ett formellt följsamt sätt
Ubiquitous systems
Collaborative filtering (e.g. Netflix Spotify)
Similarities and clustering

Petter Sandvik (<http://users.abo.fi/Petter.Sandvik/>)

Distribuerade system
P2P-nätverk
Media streaming

Forskningslaboratorier

Computational Biomodeling Laboratory (Combio Lab)

<http://tucs.fi/research/research-units/combio/>

Forskningsledare:

[Ion Petre](#)

Data Mining and Knowledge Management Laboratory

<http://tucs.fi/research/research-units/data-mining-and-knowledge-management/>

Forskningsledare:

[Barbro Back](#)

Distributed Systems Laboratory (DS Lab)

<http://tucs.fi/research/research-units/dslab/>

Forskningsledare:

[Luigia Petre](#)

[Marina Waldén](#)

IMPEd Resource Center

<https://research.it.abo.fi/research/IMPEd>

Forskningsledare:

[Ralph-Johan Back](#)