

Möjlig handledning inom Informationsteknologi våren 2023

Ivan Porres (<https://research.abo.fi/en/persons/ivan-porres-paltor>)

- Search Based Software Engineering
- Heuristics based on genetic algorithms
- Machine learning
- Frameworks for autonomous systems
- Model Driven Software Development
- Software Process Improvement
- Test-Driven development

Jan Westerholm (<https://research.abo.fi/en/persons/jan-westerholm>)

- Datorgrafik
- GPU-programmering
- Parallel programmering
- Kodoptimering

Adnan Ashraf (<https://research.abo.fi/en/persons/adnan-ashraf>)

- Cloud Computing
- Test automation for cyber physical systems
- Evolutionary algorithms
- Machine Learning

Mats Aspås (<https://research.abo.fi/en/persons/mats-aspnas>)

- Parallell programmering
- Kodoptimering
- Tillämpningar av parallell programmering

Sepinoud Azimi (<https://research.abo.fi/en/persons/sepinoud-azimi-rashti>)

- Deep learning
- Data Science
- Computational modelling of biological and medical phenomena

Jerker Björkqvist (<https://research.abo.fi/en/persons/jerker-bjorkqvist>)

- Autonoma system (fartyg, bilar, ...)
- Mjukvara för en maritim omgivning
- Sensorteknologi
- Data-analys, big data
- Time series analysis
- Trådlösa kommunikationstekniker
- Operativsystem
- Signalprocessering
- Maskindiagnostik (tillämpningar på dieselmotorer och hissar m.m.)
- Software defined radio (applications in DVB-T/T2)

Sebastien Lafond (<https://research.abo.fi/en/persons/sebastien-lafond>)

- Autonomous systems (ships, cars, ...)
- Energy efficient many-core systems
- Multi-media coding
- Stream-based languages
- Scheduling algorithms
- Parallel video transcoding systems

Andreas Lundell (<https://research.abo.fi/en/persons/andreas-lundell>)

- Optimering inom processplanering
- Maskininlärning
- Edge computing

Kristian Nybom (<https://research.abo.fi/en/persons/kristian-nybom>)

- Sensorteknologi
- Trådlösa kommunikationstekniker
- Agila mjukvaruutvecklingstekniker
- Broadcasting-nätverk
- Undervisning i programmering

Luigia Petre (<https://research.abo.fi/en/persons/luigia-petre>)

- Machine learning and data science
 - Personalized medicine
 - Gravitational waves
 - Nuclear physics
- Formal methods
 - Refinement-based methods for software development
 - Integration of formal methods
- Network modeling and analysis
 - Smart electrical grids
 - Network-on-chip architectures
 - Wireless sensor-actor networks
 - Multi-core systems

Annamari Soini (<https://research.abo.fi/en/persons/annamari-soini>)

- Programmeringsspråk
- IoT
- Autonomous vehicles
- IT-undervisning
- Könsroller inom IT
- Sociala aspekter inom IT

Dragos Truscan (<https://research.abo.fi/en/persons/dragos-truscan>)

- Cloud computing and automatic resource scaling
- Non-SQL Databases och Webbapplikationer
- Automated White Box Testing
- Parallel Testing with the Robot and TestNG frameworks
- Overview of Test tools for Android applications
- Security testing of web applications
- Comparison of web / mobile automation frameworks.

Marina Waldén (<https://research.abo.fi/en/persons/marina-walden>)

Autonoma fordon

Safe Reinforcement learning

Formella metoder

Integration med industritillämpningar

Den formella utvecklingsprocessen

Agila metoder

Grafiska gränssnitt till FM (UML, Simulink)