

Software Engineering Group

- Located in 10th floor – Ole Johan Dahls hus
- Contact
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Some examples of earlier master thesis in the SE group

- **Challenges and Solutions in Global Agile Software Development**
 - *Investigating Communication, Trust and Knowledge Sharing*
- **Teamwork Quality in a Software Engineering Capstone Course**
 - A case study of teamwork in a Software Engineering Capstone course during the COVID-19 pandemic
- **BizDev Teams in Agile Software Development**
 - *A case study of coordination between business and development*
- **Agile BI**
 - How Norwegian organizations achieve agility in Business Intelligence
- **Outsourcing in Autonomous Agile BizDevOps Teams**
 - *A case study of globally distributed teams*
- **Fordeler og utfordringer med kryssfunksjonelle produktteam i agil systemutviklingspraksis**
 - *En utforskende casestudie fra en stor nordisk forsikringsaktør med evaluering i lys av prosessforbedringslitteratur*

Yngve Lindsjørn – ynglin@ifi.uio.no

- Teamwork and Large Scale Agile Software Development
- Effective teamwork
 - The relationship between teamwork factors (e.g. communication, coordination, leadership) and team performance
- Education (university level) in software engineering courses working with projects in teams

Viktoria Stray- 1



- Flere problemstillinger mulig. For eksempel
 - Hvordan lykkes med innovasjon?
 - Hvordan sikre autonome effektive smidige team?
 - Hvordan jobbe smart i smidige prosjekter?
- Samarbeid med bedrifter og SINTEF i et forskningsprosjekt støttet av forskningsrådet
(<https://www.sintef.no/prosjekter/2020/10xteams/>)
- Oppgaven krever at man snakker skandinavisk da man skal gjøre intervjuer og observasjoner i en norsk bedrift



knowit



Viktoria Stray- 2

- Systematic literature review
 - Of a selected topic in Software Engineering. For example,
 - Software testing
 - Use of theories
 - Meetings
 - Can be short or long thesis
 - What is a systematic literature review?
 - <https://libguides.csu.edu.au/review/Systematic>

Antonio Martini - I

- Topics
 - Technical Debt
 - Software Architecture
 - Coordination and Communication
 - Large Agile
 - Software and Process Measurements
- Other topics only if combined with the previous ones (requires additional supervision)
 - Security
 - Machine Learning (also see next slide)
 - Team Collaboration
- Take inspiration from IN5140 lectures

Antonio Martini - II

- Available theses
 - Improving a software platform for immunity research based on machine learning
 - Collaboration with ML group at IFI
 - High social impact (ImmuneML project)
 - See details
 - <https://www.mn.uio.no/ifi/english/people/aca/antonima/master-theses-proposals/improving-a-software-platform-for-immunity-research-based-on-machine-learning.docx>
 - No prior knowledge of biology or immunity is needed.
 - Only basic knowledge of machine learning is required

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- Software Testing

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- See

<https://www.mn.uio.no/ifi/studier/masteroppgaver/software-engineering/>