NTNU

Norwegian University of Science and Technology

Project and Self-introduction

RAMS Seminar

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About me

Tianqi Sun

孙 天齐

Zibo, Shandong

- 400km from Beijing (3 hrs by train)
- Long History back to 2,000 BC
- Petrochemical, pharmacy, ceramics
- Yellow River

Education

Bachelor in Safety Engineering (2011 - 2015)

- Basics: math, physics, statistics, mechanics
- Specialized courses:
  - Safety evaluation
  - Risk control and emergency management
- Field trip:
  - Oil depot and petrochemical companies

Thesis: Statistical and probability analysis of offshore platform fire and explosion accidents

- Accident data collection
- Analysis with ETA, FTA and Bayesian Network
- Sensitivity & posterior probability analyses.

Education

Master in RAMS (2015 – 2017)

Thesis: Production Availablity Analysis: Implication on Modelling due to Subsea Conditions

- Supervisor: Mary Ann Lundteigen
- Co-supervisor: HyungJu Kim, Anne Barros, Siegfried Eisinger, DNV GL
- Compare a FPSO-based production concept and a subsea seperation concept with ExtendSim

INTPART Summer School in MUN (2016 summer)

- Lectures over Integrated Operation (IO), drilling, improved oil recovery, logistics….
- Lab visiting
- Training in Offshore Safety and Survival Center
- Case study of development plan in harsh environment.

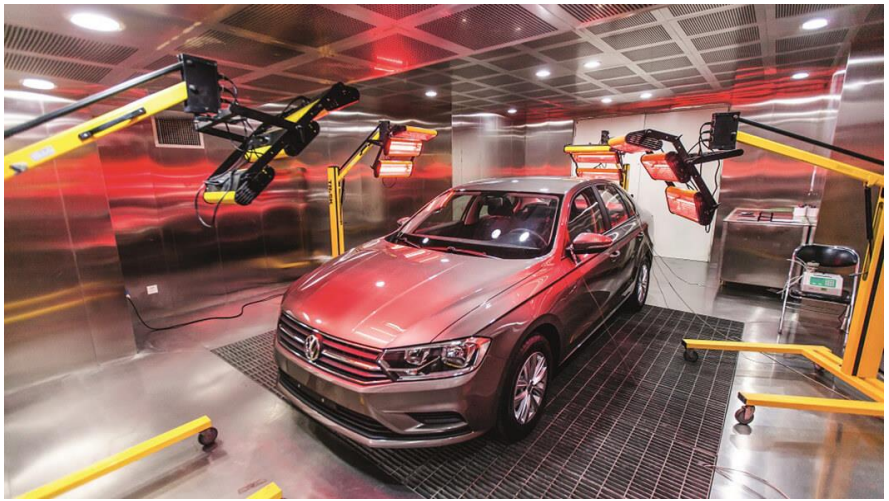
Work Experience

Intern at Innovation Norway, Beijing Office (2017 – 2018)

- Daily management of two websites & social media (WordPress, MailChimp)
- Organization of bilateral business events
  - Help Norwegian companies find collabration opportunities in Chinese market

Safety Engineer at FAW-VW Tianjin (2018 – 2020)

- **About the company**
  - Joint venture (FAW & Volkswagen)
  - New branch: SOP in Aug. 2018
  - Produce: VW Tayron (探岳), Audi A3
- **About the position**
  - Department of Safety and Guards
  - Risk statistics collection and analysis
  - Special equipment management
  - Related budget management
  - Events coordinator
  - Other



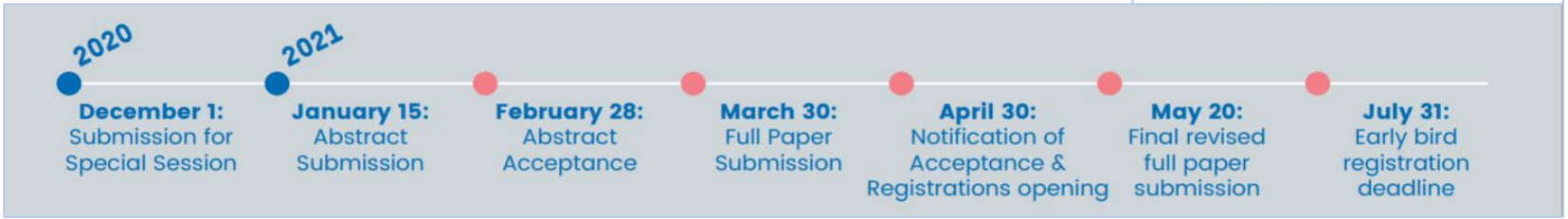
PhD Position

- **Project:** SMARTere Vedlikehold
  - 7+2 PhD positions
  - >25 MSc/BSc projects
  - Multidisciplinary (condition registration, data analysis, strategic analysis)

- **Research Topic:** Strategy and Criteria for Preventive and Corrective Maintenance
  - Supervisor: Jørn Vatn
  - Starting date: September, 2020
- **Main Focus:** develop economical models for road maintenance and evaluate them in terms of the benefit for society
  - Investigate the degradation and failure modes for various road elements
  - Conduct social economic and strategic analyses of the risk-based maintenance

Current work

- **Road Performance:**
  - Look into NPRA's performance evaluation for road elements to check the available data sets
- **Literature Review**:
  - Theoretical basis: knowledge over common reliability models and statistics models
  - State-of-art for maintenance optimization research
  - Relevant researches within the RAMS group
- **Programming skills**
- **Short-term ambition:** ESREL 2021 Conference Paper



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Thanks for listening