Research is seldom a 9-to-5 job

entrepreneurial approach to doctoral studies

Raine Viitala
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Who?

Raine Viitala, born 1992 in Mustamaa, South-Ostrobothnia
Currently postdoctoral researcher in ARotor, Engineering Design
M.Sc. 2017, D.Sc. 2018

Thesis: Effect of Assembled Bearing Inner Ring Geometry on Subcritical Rotor Vibration
Doctoral studies

- Article based thesis
  - All you need is … three articles (and 40 cr)

- Typical student way
  - check the exam requirements before the course starts and act accordingly

- Sometimes sacrifices required
  - However, progressing is rewarding

- “Always working and on holiday”
  - Not the whole truth, but academic work has its freedom
Publishing

• "Publish or perish"
  • Scientific results do not "exist" until they are published

• **One article per idea**
  • If you have two ideas, write two articles

• **Doctoral students eat low hanging fruits**
  • Better done than perfect
  • You have plenty of time to change the world – after your doctoral studies

• **Start with an experienced co-author**

• **Review process ensures the quality**
  • Reviewer is always right
  • Negative feedback -> improve -> resubmit
  • The more comments -> the more committed reviewer
Tricks and treats

- Co-operation
  - Nobody does their thesis alone

- Focus
  - Your work is to write the thesis

- Avoid topic changes and drift
  - The later the change, the higher the cost

- Choose your tools, learn how to use them and stick to them
  - Word vs. Latex, Matlab vs. Python…
  - Mastering one toolchain is time wise superior compared to constant changing

- Build on top of your own, your colleagues and other researcher’s work
  - Not everybody has to start from F=ma
Take it seriously…

But remember to maintain a twinkle in your eye!
Finally

• Remember to do something else!
  • Nobody wants to be a one trick wonder!
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ARotor - Full scale rotor laboratory

- Rotors up to 25 000 kg
- Manufacturing for operating conditions
- Geometry measurement
- Rotordynamics
- Bearing excitations
- Foundation stiffness effect on vibration
- Harmonic and subcritical vibration