

The logo for Delta4 by ScandiDos. The word "Delta" is in a bold, dark red font, and the superscript "4" is in a lighter red. Below it, "by ScandiDos" is written in a smaller, dark grey font.

Delta⁴
by ScandiDos

How to become a software developer after graduation

Dr. Helen Avelin
Software Engineer
ScandiDos

- My education
- My career path
- What I do today
- Systems development
- Consulting
- A career as a systems developer
- Useful competences
- Learn to code on the job



My education

- 1995-1998 Matematiskt-naturvetenskapligt program Uppsala University
 - Physics (Bachelor's degree)
 - Mathematics
 - Amanuens (teaching assistant)



My education

- 1998-1999 Exchange student University of Galway Ireland, Master's level
- 1999-2007 PhD student in Mathematics, Uppsala University



My career path

- 2007-2010 Consultant ÅF
- 2010-2012 Senior systems developer Nucletron
- 2012-2016 Senior systems developer Elekta
- 2016-today Systems developer ScandiDos



What I do today

- ScandiDos
 - Quality assurance for radiotherapy
 - Medical device software
 - Expert on dose calculation algorithms



What I do today

- Systems development
- Team leader
- Product design



Systems development

- Write code
- Review code
- Test code
- Write requirements and tests
- Write manual
- Develop coding practices
- Decide on tools, techniques and implementation details
- Team work

Consulting

- To be a consultant is to say yes!
- But make sure you deliver what you promised.

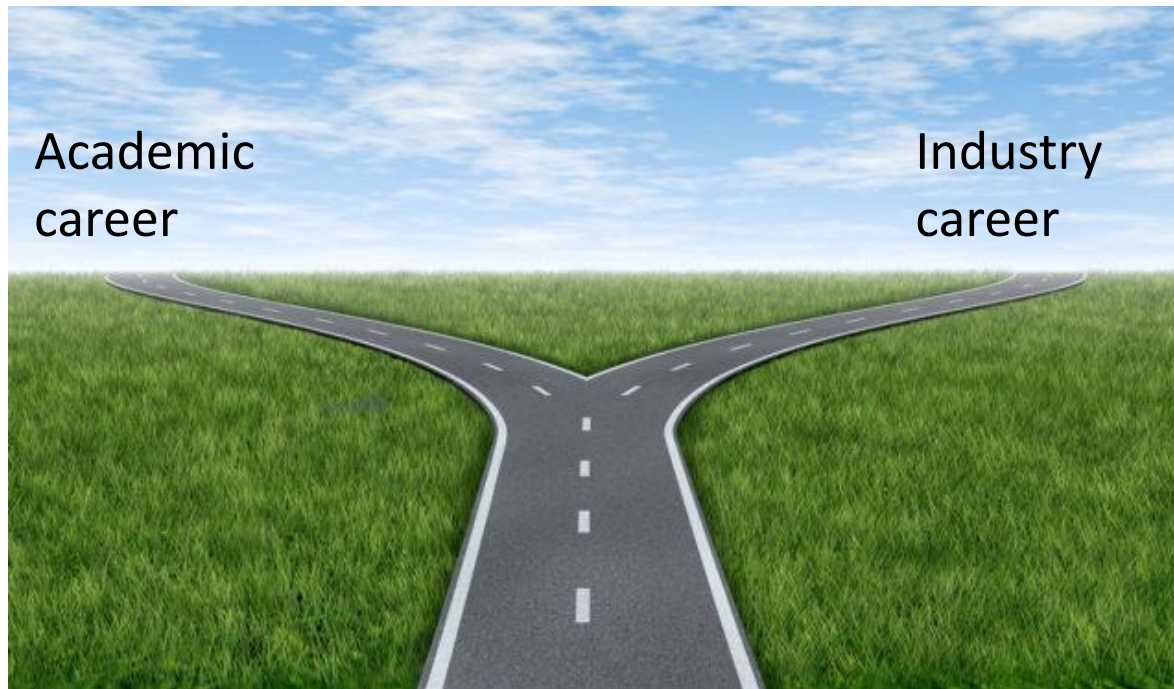


Consulting

- Perfect time to
 - Learn software development skills
 - Try out several fields and workplaces
 - Remake yourself as a software developer



You are at a crossroads



A career as a software developer

- Regular developer
- Specialist/Expert (PhD)
- R&D
- Don't lose track! Don't become a manager!

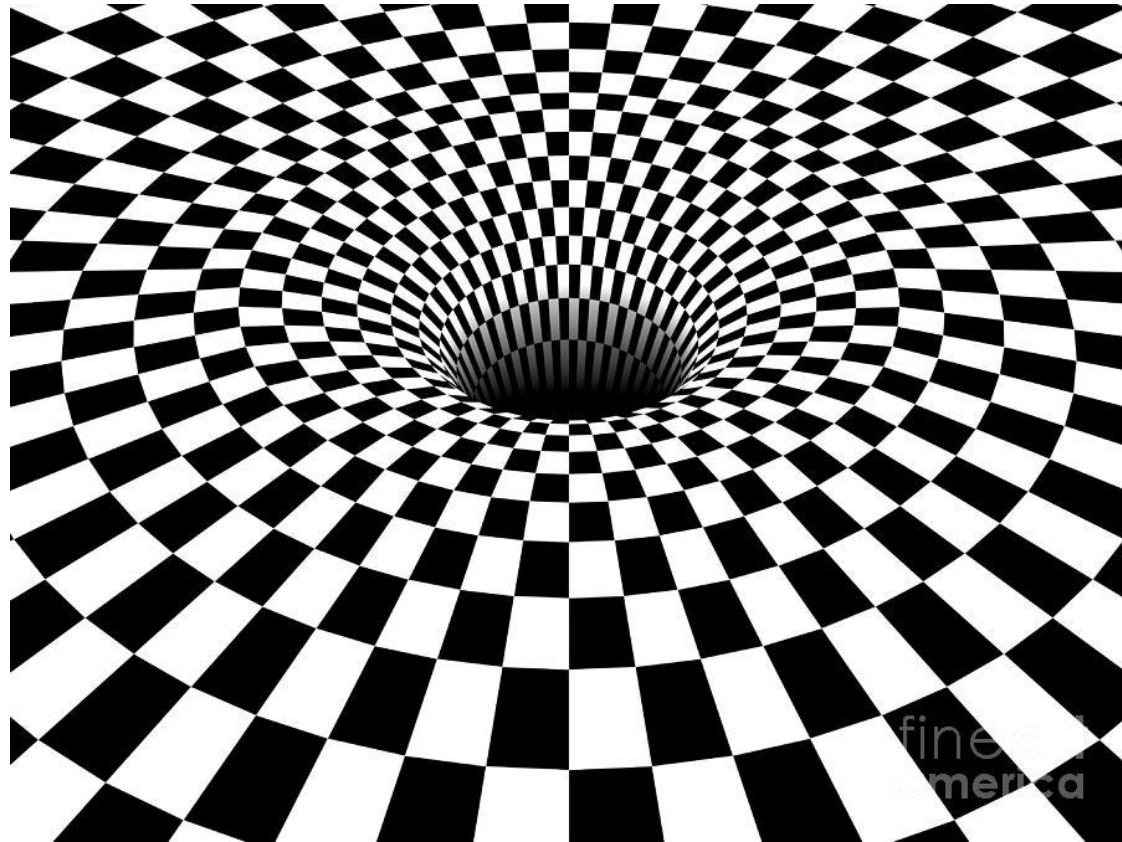


Useful competences

- The ability to learn
- The courage to never say "I can't do this"
- Scientific approach
- Logical thinking
- Handle large amounts of knowledge and draw logical conclusions

Not so useful competencies

- The ability to dig very deep holes
- The ability to work until perfection



Can you code?

- Say Yes!
- Class assignments / Research code
- No, sorry, you don't know how to write production code



Learn to code on the job

- You can learn, fast and a lot
- Make sure it is a larger company with teams
- Read books
- Read the coding guidelines and follow them
- Read your colleagues' code and use the same style and techniques
- Read on Stack Overflow
- Pair-programming
- Code review
- Learn about unit testing and continuous integration

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Questions?

