Hauptseminar Sommersemester 2015:

### Cognitive Computing

Dr. Frank J. Furrer

Seminar Day 2: 10-July-2015

### Content:

- 1. Introduction (F.J. Furrer)
- 2. Presentations and Feedback (all)
- 3. Final Words (F.J. Furrer)

### Introduction

### State of the Papers (2<sup>nd</sup> Round) – General Comments:

### Good:

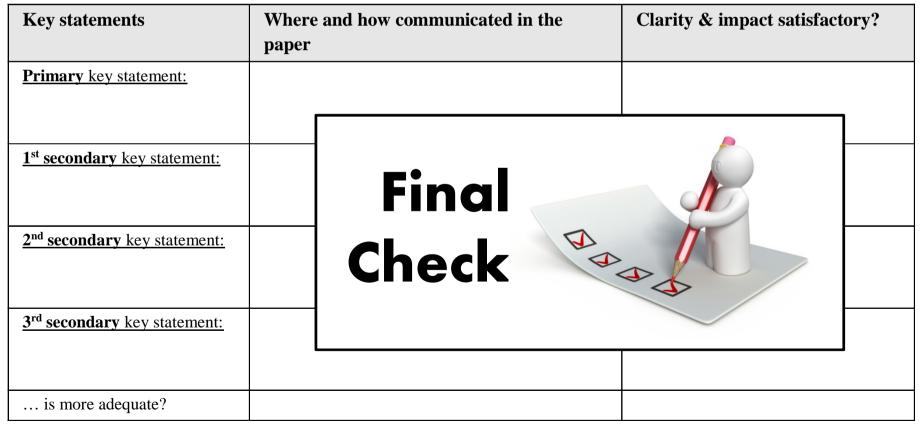
- Topics chosen and delineation
- Storylines
- Content
- Structure
- Personal contributions

### Not yet satisfactory:

- State of the art (Existing work)
- **Visibility** of personal contributions
- Conclusions (recommendations, ...)
- Number of figures (!)



## Focus (1/2):



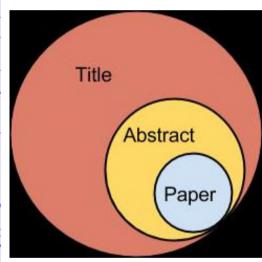


### Focus (2/2):

Concept (Begriff)		Really necessary for the storyline of the paper?
Concept (Begriff) 1:		
Concept (Begriff) 2:		
Concept (Begriff) 3:	Final	
Concept (Begriff) 4:	Check	
etc.		

### 3 areas of improvement:

### **Title**



- ... catching
- ... promising
- ... seducing

### Storyline



- ... logical
- ... "simple"
- ... convincing

### Unnecessary Concepts

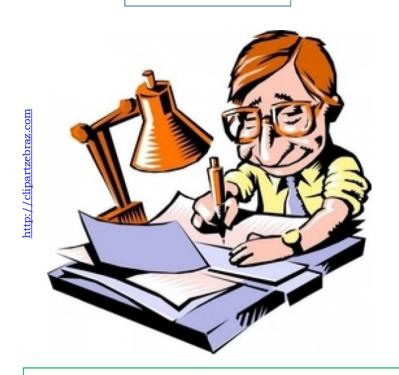


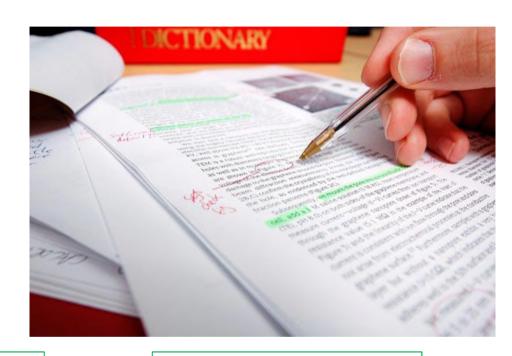
- ... minimize
- ... define
- ... consistency

### Author



### Reviewer





- Innovation
- Storyline
- State of the Art
- Content
- Author's Contribution
- Conclusions & Recommendations

- Competence
- Conflict of Interest
- Fairness
- Ethics

http://physicsworld.com

### Reviewer Ethics (1/2):

### **Reviewers should:**

- $\checkmark$  Decline any review for which you feel not > 95% fit for (competence, time, ...)
- ✓ Decline any review if there is a conflict of interest (similar work, ...)
- $\checkmark$  Provide timely reviews (... otherwise the journal editor is in trouble  $\odot$ )
- Keep manuscript and names of authors confidential
- ✓ Provide a fair, substantiated, comprehensive review
- ✓ Deliver comprehensive, useful recommendations to author(s) and editor
- ✓ Report any suspicion of misconduct (illegal or unreferenced copying, ...)

Irene Hames: **Peer Review and Manuscript Management in Scientific Journals –** *Guidelines for Good Practice*. Blackwell Publishing, Oxford, UK, 2007. ISBN 978-1-4051-3159-9

### Reviewer Ethics (2/2):

### **Reviewers should NOT:**

- ✓ Attack or make any personal comments about the author(s).
- ✓ Agree to review a manuscript just to gain insight of it for personal benefit.
- ✓ Use information in the manuscript for their own or other's benefit
- ✓ Contact anyone else with respect to the review
- ✓ Request that authors include citations to their own work
- ✓ Contact the authors directly about any manuscript they review

Irene Hames: **Peer Review and Manuscript Management in Scientific Journals –** *Guidelines for Good Practice*. Blackwell Publishing, Oxford, UK, 2007. ISBN 978-1-4051-3159-9

### Skill:

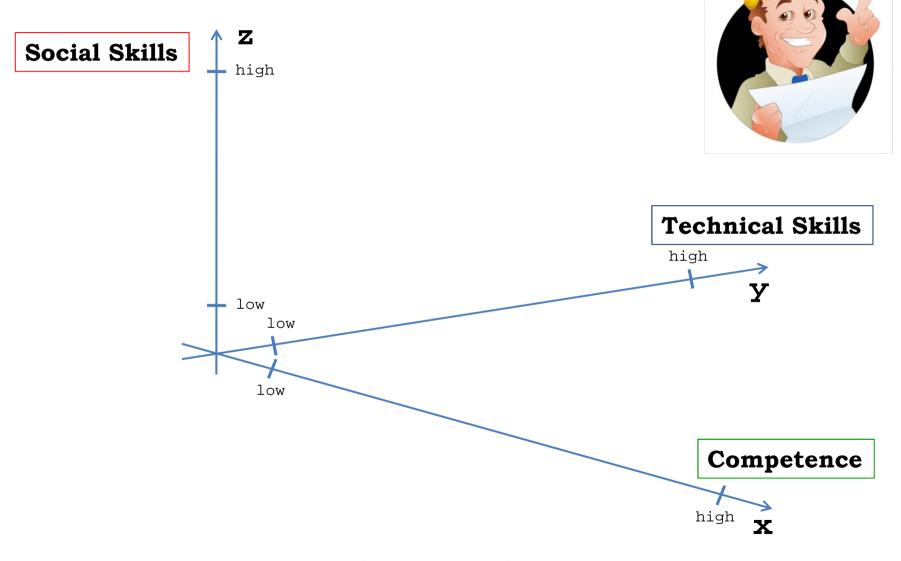
The ability to do something well

[The New Oxford Dictionary of English]

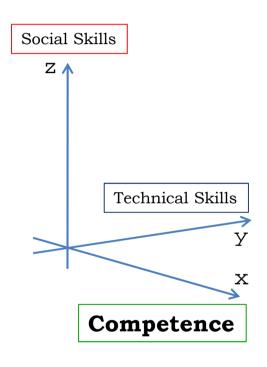


http://www.inman.com

### Skills Coordinate System



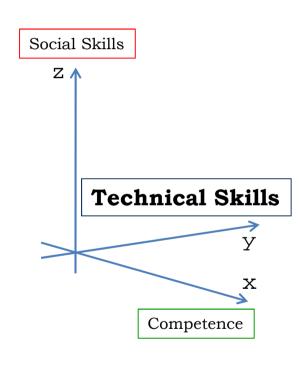
### Skills: Competence



### (Professional) Competence

- IT knowledge
- IT (practical) experience
- State-of-the-Art knowledge (broad, hardware, software, processes)
- Technology mastering (HW & SW)
- Business knowledge
- Innovation capability
- Vision

### Skills: Technical Skills



### **Technical Skills**

- Communication skills (speech & writing)
- Presentation skills (oral, graphical & writing)
- Logical reasoning capability
- Efficiency & effectiveness
- Languages

### Efficiency:

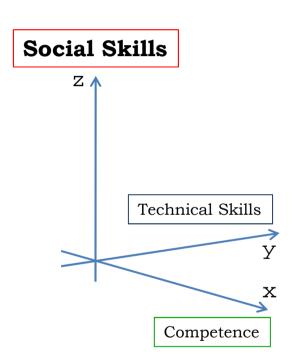
Doing the things right

### **Effectiveness:**

Doing the right things

• "Architecture Feel" (Simplicity & beauty)

### Skills: Social Skills

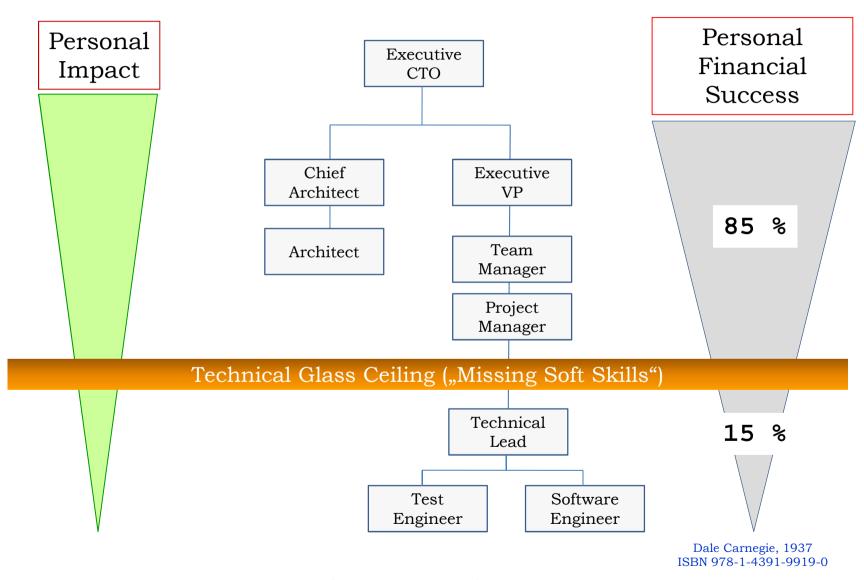


### Social Skills

- Negotiation skills
- Persuasion capability
- People interaction capability
- Enthusiasm
- Leadership
- Life-long learning
- Socializing/Networking
- Team Work
- Honesty (Ethics)
- Work-life balance



### Hard Skills $\leftrightarrow$ Soft Skills: Which are more important?

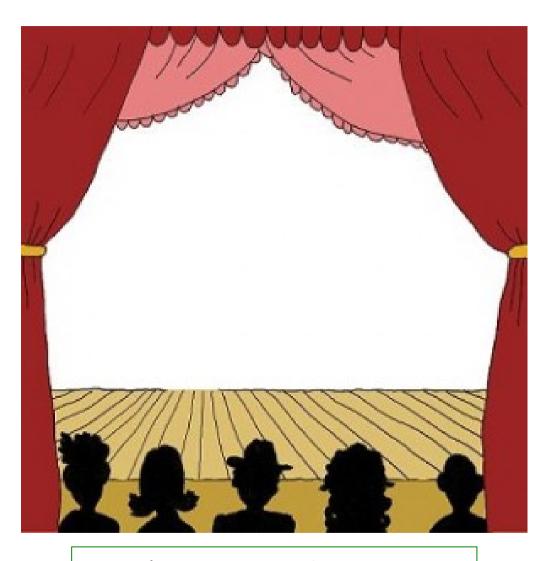


### Presentations and Feedback

### Procedure Presentation (15 mins) **FEEDBACK:** Each participant: One positive comment One improvement comment Excellent Consistent Storyline Attractive Good Improvable Fitting/Adequate Audience Excellent Illustrations Granularity Power of Expression Good **Pictures** Support of Speaker Feedback · Focussed (emphasizing the message of the slide) Excellent Unnecessary effects **Animation** (10 mins) Timing mprovable Too dense (per slide or per time unit) Too slow (more material per slide or per time unit) Density Balance of slides Good Bullet point lists Personal style Excellent · Interaction with the audience Delivery Complementary speech/illustrations Good

Storyline	<ul><li>Logical</li><li>Consistent</li><li>Attractive</li><li>Clear</li></ul>	Excellent Good Improvable	1
Illustrations Pictures	<ul><li>Fitting/Adequate</li><li>Granularity</li><li>Power of Expression</li><li>Support of Speaker</li></ul>	Excellent Good Improvable	√
Animation	<ul> <li>Focussed (message of the slide)</li> <li>Speed</li> <li>Unnecessary effects</li> <li>Timing</li> </ul>	Excellent Good Improvable	<b>√</b>
Density	<ul> <li>Too high</li> <li>Too low</li> <li>Balance of slides</li> <li>Bullet point lists</li> </ul>	Excellent Good Improvable	<b></b> √
Delivery	<ul> <li>Personal style</li> <li>Interaction with the audience</li> <li>Complementary speech/illustrations</li> </ul>	Excellent Good Improvable	1

HS SS 2015: Cognitive Computing Schedule 2 <sup>nd</sup> Seminar Day July 10, 2015				
Name	Qx	Presentation (15 min)	Feedback (10 min)	
Introduction (F.J. Furrer)		09:00 -	09:15	
Robert Richter	3	09:15 – 09:30	09:30 - 09:40	
Johannes Pietrzyk	3	09:40 - 09:55	09:55 – 10:05	
Ben Blau	2	10:05 – 10:20	10:20 – 10:30	
Tyler Butler	1	10:30 – 10:45	10:45 – 10:55	
Break		10:55 –	11:15	
Tobias Nett	1	11:15 – 11:30	11:30 – 11:40	
Philipp Schröppel	1	11:40 – 11:55	11:55 – 12:05	
Felix Mai	1	12:05 – 12:20	12:20 – 12:30	
Final Words (F.J. Furrer)		12:30 – 13:00		



... the stage is yours!

Name	Presentation	Feedback
Robert Richter	09:15-09:30	09:30-09:40

	• Logical	Excellent	abla
Storyline	• Consistent	Good	
•	Attractive	Improvable	П
	• Clear	protable	
111	<ul><li>Fitting/Adequate</li></ul>	Excellent	1
Illustrations	Granularity	Good	
Pictures	Power of Expression	Improvable	П
	<ul> <li>Support of Speaker</li> </ul>	Improvable	
	<ul> <li>Focussed (message of the slide)</li> </ul>	Excellent	abla
Animation	• Speed	Good	
	Unnecessary effects     ·	Improvable	
	Timing	Improvable	
	Too high	Excellent	$\checkmark$
Density	• Too low	Good	
	Balance of slides	Improvable	
	Bullet point lists	improvable	
	<ul> <li>Personal style</li> </ul>	Excellent	abla
Delivery	Interaction with the audience	Good	
•	<ul> <li>Complementary speech/illustrations</li> </ul>	Improvable	

Name	Presentation	Feedback
Johannes Pietrzyk	09:40-09:55	09:55-10:05

Storyline	<ul><li>Logical</li><li>Consistent</li><li>Attractive</li></ul>	Excellent	
Illustrations Pictures	<ul> <li>Clear</li> <li>Fitting/Adequate</li> <li>Granularity</li> <li>Power of Expression</li> </ul>	Excellent Good Improvable	
Animation	<ul> <li>Support of Speaker</li> <li>Focussed (message of the slide)</li> <li>Speed</li> <li>Unnecessary effects</li> <li>Timing</li> </ul>	Excellent Good Improvable	□ • <b>1</b>
Density	<ul> <li>Too high</li> <li>Too low</li> <li>Balance of slides</li> <li>Bullet point lists</li> </ul>	Excellent Good Improvable	<b>√</b>
Delivery	<ul> <li>Personal style</li> <li>Interaction with the audience</li> <li>Complementary speech/illustrations</li> </ul>	Excellent Good Improvable	

Name	Presentation	Feedback
Ben Blau	10:05-10:20	10:20-10:30

Storyline	<ul><li>Logical</li><li>Consistent</li><li>Attractive</li><li>Clear</li></ul>	Excellent Good Improvable	<b>↓</b>
Illustrations Pictures	<ul><li>Fitting/Adequate</li><li>Granularity</li><li>Power of Expression</li><li>Support of Speaker</li></ul>	Excellent Good Improvable	□ <b>√</b> □
Animation	<ul> <li>Focussed (message of the slide)</li> <li>Speed</li> <li>Unnecessary effects</li> <li>Timing</li> </ul>	Excellent Good Improvable	
Density	<ul> <li>Too high</li> <li>Too low</li> <li>Balance of slides</li> <li>Bullet point lists</li> </ul>	Excellent Good Improvable	<b>↓</b>
Delivery	<ul> <li>Personal style</li> <li>Interaction with the audience</li> <li>Complementary speech/illustrations</li> </ul>	Excellent Good Improvable	<b>↓</b> □

Name	Presentation	Feedback
Tyler Butler	10:30 – 10:45	10:45 – 10:55

Storyline	<ul><li>Logical</li><li>Consistent</li></ul>	Excellent Good	
,	<ul><li>Attractive</li><li>Clear</li></ul>	Improvable	
Illustrations Pictures	<ul><li>Fitting/Adequate</li><li>Granularity</li><li>Power of Expression</li><li>Support of Speaker</li></ul>	Excellent Good Improvable	<b>√</b>
Animation	<ul> <li>Focussed (message of the slide)</li> <li>Speed</li> <li>Unnecessary effects</li> <li>Timing</li> </ul>	Excellent Good Improvable	□ <b>1</b>
Density	<ul> <li>Too high</li> <li>Too low</li> <li>Balance of slides</li> <li>Bullet point lists</li> </ul>	Excellent Good Improvable	
Delivery	<ul> <li>Personal style</li> <li>Interaction with the audience</li> <li>Complementary speech/illustrations</li> </ul>	Excellent Good Improvable	

Name	Presentation	Feedback
Tobias Nett	11:15-11:30	11:30-11:40

	<ul><li>Logical</li><li>Consistent</li></ul>	Excellent	
Storyline	Attractive	Good	
	<ul><li>Clear</li></ul>	Improvable	
	<ul><li>Fitting/Adequate</li></ul>	Excellent	□√
Illustrations	Granularity	Good	
Pictures	<ul><li>Power of Expression</li><li>Support of Speaker</li></ul>	Improvable	
	<ul> <li>Focussed (message of the slide)</li> </ul>	Excellent	$   \!$
Animation	• Speed	Good	
	<ul><li>Unnecessary effects</li><li>Timing</li></ul>	Improvable	
	<ul><li>Too high</li></ul>	Excellent	$ \checkmark $
Density	<ul><li>Too low</li><li>Balance of slides</li></ul>	Good	
	<ul> <li>Bullet point lists</li> </ul>	Improvable	
	Personal style	Excellent	$\checkmark$
Delivery	Interaction with the audience     Complementary speech (illustrations)	Good	
	<ul> <li>Complementary speech/illustrations</li> </ul>	Improvable	

Name	Presentation	Feedback
Philipp Schröppel	11:40-11:55	11:55-12:05

	Fillipp Schloppel	11.40-11.55	11.55-12.05	
	• Logical		Excellent	<b>↓</b>
Storyline	• Consistent		Good	
	<ul><li>Attractive</li><li>Clear</li></ul>		Improva	ble 🗌
	• Clear		'	
	• Fitting/Adeqւ	ıate	Excellent	t 🗆
Illustrations	<ul> <li>Granularity</li> </ul>		Good	$\sqrt{}$
<b>Pictures</b>	<ul> <li>Power of Exp</li> </ul>	ression		
	<ul> <li>Support of Sp</li> </ul>	eaker	Improva	ble 🗆
	• Focussed (me	essage of the slid	e) Excellent	t 🗆
Animation	<ul><li>Speed</li></ul>		Good	
	<ul><li>Unnecessary effects</li><li>Timing</li></ul>			_
			Improva	ble 🗌
	Too high		Excellent	t 🗖
Density	<ul><li>Too low</li></ul>		Good	
Delisity	<ul> <li>Balance of sli</li> </ul>	des		$\Box$
	<ul> <li>Bullet point li</li> </ul>	sts	Improva	ble 🗌
	Personal style	9	Excellent	: 🗆
Delivery	<ul><li>Interaction w</li></ul>	ith the audience	Good	abla
	<ul> <li>Complementary speech/illustrations</li> </ul>		rations	
			Improva	ble 📙

Name	Presentation	Feedback
Felix Mai	12:05-12:20	12:20-12:30

	• Logical	Excellent	<b>√</b>
Storyline	• Consistent	Good	
	<ul><li>Attractive</li><li>Clear</li></ul>	Improvable	
	Fitting/Adequate	Excellent	1
Illustrations	Granularity     Decrease of Everyopeians	Good	
Pictures	<ul><li>Power of Expression</li><li>Support of Speaker</li></ul>	Improvable	
	Focussed (message of the slide)	Excellent	
Animation	• Speed	Good	$\sqrt{}$
	<ul><li>Unnecessary effects</li><li>Timing</li></ul>	Improvable	
	Too high	Excellent	1
Density	• Too low	Good	
	<ul><li>Balance of slides</li><li>Bullet point lists</li></ul>	Improvable	
	Personal style	Excellent	
Delivery	Interaction with the audience	Good	$   \sqrt{} $
	<ul> <li>Complementary speech/illustrations</li> </ul>	Improvable	

### Final Words

### Excellent, motivated and valuable work has been done!

I like it a lot.

After the delivery of the final paper (August 7, 2015):

... you have earned 3 ECTS Credits

These will be credited by Katrin Heber



http://audioto.ru/best/ects-credits-system

Exception: Benjamin Blau and Tyler Butler will receive their seminar assessment next week

### Feedback from your side?

### Was the Hauptseminar too demanding?



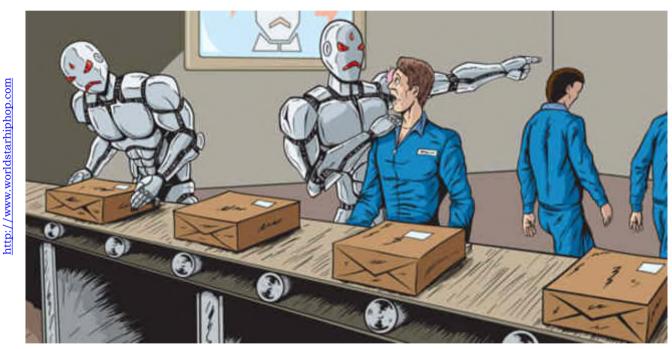
Timewise?	
Just right:	
Too much time invest:	

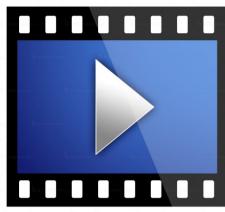


Content-wise?	
Just right:	
Too difficult:	

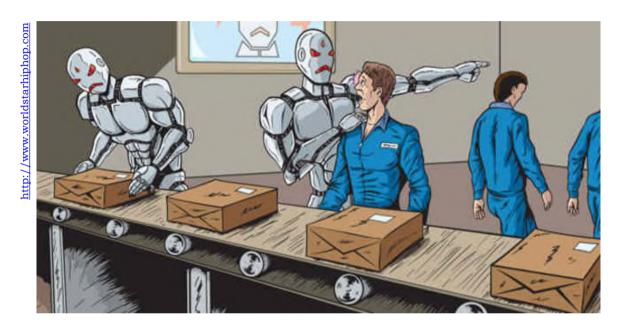
# www.youtube.com watch?v=7Pq-S557XQL

### «Humans need not apply»



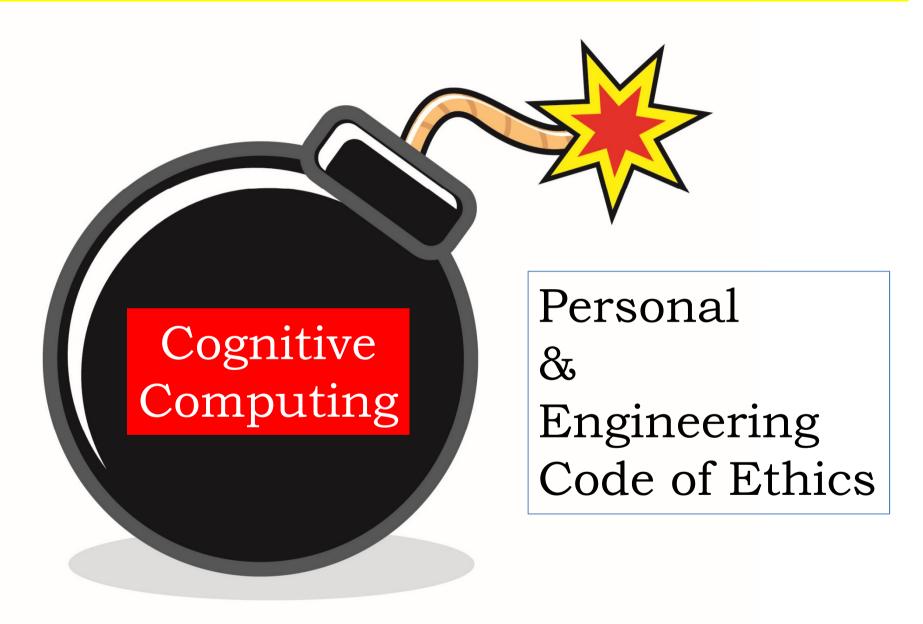


### «Humans need not apply»



Why this film as the final contribution?

... We as engineers have a responsibility towards people and society!







### IEEE Code of Ethics: "I agree:"

1.to accept responsibility in making decisions consistent with the safety, health, and welfare of the public, and to disclose promptly factors that might endanger the public or the environment;

2.to avoid real or perceived conflicts of interest whenever possible, and to disclose them to affected parties when they do exist;

3.to be honest and realistic in stating claims or estimates based on available data;

4.to reject bribery in all its forms;

5.to improve the understanding of technology; its appropriate application, and potential consequences;

6.to maintain and improve our technical competence and to undertake technological tasks for others only if qualified by training or experience, or after full disclosure of pertinent limitations;

7.to seek, accept, and offer honest criticism of technical work, to acknowledge and correct errors, and to credit properly the contributions of others;

8.to treat fairly all persons and to not engage in acts of discrimination based on race, religion, gender, disability, age, national origin, sexual orientation, gender identity, or gender expression;

9.to avoid injuring others, their property, reputation, or employment by false or malicious action;

10.to assist colleagues and co-workers in their professional development and to support them in following this code of ethics.

http://www.ieee.org/about/corporate/governance/p7-8.html

### http://www.huffingtonpost.com

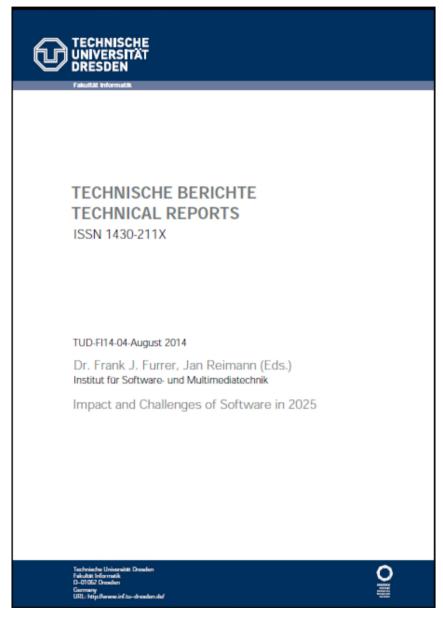
### HS 2015: Cognitive Computing



Be aware of your engineering actions and decisions and their impact and consequences



I enjoyed this Hauptseminar and thank you sincerely for your very active participation





### Contact Details:

frank.j.furrer@bluewin.ch

Mobile: +41 (0)79 401 48 60 Phone: +41 (0)52 740 32 28

Postal Address:

Dr. Frank J. Furrer

Guldifuess 3

CH-8260 Stein am Rhein

Schweiz

Hauptseminar Website:

http://bit.do/HS2015 CognitiveComputing