

# Future-Proof Software-Systems (FPSS)

## **Administrative Information**

Lecture WS 2017/18: Prof. Dr. Frank J. Furrer



Prof. h.c. Dr. Frank J. Furrer

## CV Summary

2015 (July 1): **Professor h.c.** of the Computer Science  
Department of the Technical University of Dresden (TUD)

2013/14: **Lehrbeauftragter** TUD Dresden

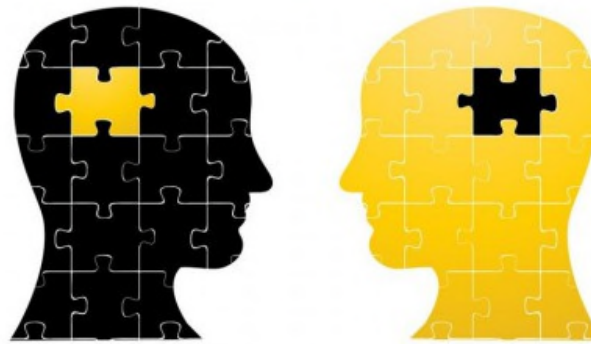
1975 -2011: **Industry-career** in industrial control systems and in  
system/software architecture for very large IT systems

1974: **Ph.D.EE** (Dr. sc. techn. ETHZ) from the Swiss Federal Institute of  
Technology, Zurich (ETH-Z)

1970: **MS** in Electrical Engineering 1970 from the Swiss Federal Institute of  
Technology, Zurich (ETH-Z)

1945 (January 27): Born in Switzerland (Zurich)

I prefer **dialog**, rather than monolog: Feel free to ask questions at any time



I am available for additional questions or discussions after each lecture

... or at any time via e-mail:

[frank.j.furrer@bluewin.ch](mailto:frank.j.furrer@bluewin.ch)

[frank.furrer@mailbox.tu-dresden.de](mailto:frank.furrer@mailbox.tu-dresden.de)

## Exams:

[Official Text]:

Participants can receive a grade via an **oral exam** or a **not graded certificate of attendance** (Sitzschein).



## Certificate of Attendance

Participants can receive a **not graded certificate of attendance**.  
(NO credits ECTS)

Please write an email to [katrin.heber@tu-dresden.de](mailto:katrin.heber@tu-dresden.de)  
(Secretary of the Chair of Software Technology).  
She will arrange the certificate.

DO NOT CONTACT ME DIRECTLY. THANKS.

For the not graded certificate you need to sign the  
**attendance list** provided during each lecture.

## Oral Exam

Participants can receive a grade via an **oral exam**  
**(3 credits ECTS)**



Please check your exam regulations which type of credit (mark/certificate) you need. If you are interested in an examination date, please write an email to [katrin.heber@tu-dresden.de](mailto:katrin.heber@tu-dresden.de) (Secretary of the Chair of Software Technology). She will schedule the exams.

DO NOT CONTACT ME DIRECTLY. THANKS

Note: Because I am living in **Switzerland**, my availability in Dresden is limited



## Sample Exam Questions:

#	<b>A</b> <b>Erkennung der Zusammenhänge des Prüfungsgebietes</b> <b>(Understanding)</b>	<b>B</b> <b>Einordnung spezieller Fragestellungen in die Zusammenhänge des Prüfungsgebietes</b> <b>(Reasoning)</b>	<b>C</b> <b>Grundlagenwissen gemäss dem Stand des Studiums</b> <b>(Knowledge)</b>
1.	What is a good future-proof software-architecture? Why?	Which are the contra-productive behaviors of an IT architect?	Which is the most important skill of a successful IT architect? Why?
2.	Why are architecture principles so important?	Have architecture principles to be strictly enforced in each situation and in each project?	Which is the resistance encountered by an IT architect while trying to enforce architecture-principles?



**Lecture:** 3.+ 4. DS (11:10 – 12:40 and 13:00 – 14:30) in Room APB/E010

Date	Topic
Wed., 18. October 2017	Introduction
Wed., 1. November 2017	Managed Evolution for Software
Wed., 15. November 2017	Architecting for Changeability (1)
Wed, 29. November 2017	Architecting for Changeability (2)
Wed., 13. December 2017	Architecting for Changeability (3)
Wed., 10. January 2018	Architecting for Dependability
Wed., 24. January 2018	Skills and Personality of the Future-Proof Software-Engineer
March 12. – 16., 2018	Possible Dates for Exams (Appointments via <a href="mailto:katrin.heber@tu-dresden.de">katrin.heber@tu-dresden.de</a> )



More Information can be found on the FPSS Lecture Website:

<http://st.inf.tu-dresden.de/teaching/fps>