Frank-Peter Schilling

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in frankpeterschilling

Employment

2024-2025	**Director a.i.**, *Centre for AI (CAI), ZHAW*, Winterthur (CH)
2023-	**Deputy Director**, *Centre for AI (CAI), ZHAW*, Winterthur (CH)
2022-	**Senior Lecturer & Group Leader**, *ZHAW*, Winterthur (CH) Head, Intelligent Vision Systems (IVS) group, Centre for AI (CAI)
2022-2025	**Adjunct Professor of Data Science**, *Victoria University of Wellington*, Wellington (NZ)
2019-2022	**Senior Researcher**, *ZHAW*, Winterthur (CH) Centre for AI (CAI, 2021-); Inst. for Applied Information Technology (InIT, 2019-2021); AI and Deep Learning
2018-2019	**Guest Scientist**, *Zurich University of Applied Sciences ZHAW*, Winterthur (CH) Institute for Applied Information Technology (InIT); AI/ML, Deep Learning, Computer Vision
2015-2018	**Owner**, *fp solutions*, Bern and Winterthur (CH) Consulting, Software engineering
2007-2014	**Visiting Reseacher**, *CERN*, Geneva (CH) Permanently delegated from KIT to conduct research at CMS experiment at the LHC
2007-2014	**Senior Research Scientist**, *Karlsruhe Institute of Technology KIT*, Karlsruhe (DE) Research at the CMS experiment at the Large Hadron Collider LHC
2004-2006	**Research Fellow**, *CERN*, Geneva (CH) Preparatory work for the LHC and the CMS experiment
2001-2004	**Postdoctoral Fellow**, *DESY*, Hamburg (DE) Research and data analysis at the H1 experiment at the HERA particle accelerator

Education & Training

2024-	**IEEE CertifAIEd Authorized Lead Assessor**, *IEEE SA*
2015-	**IPMA Certification in Project Management**, *VZPM*
2023-2024	**Certificate of Advanced Studies (CAS), University Didactics**, *PH Zurich*
1998-2001	**PhD in Physics (Dr. rer. nat.)**, *University of Heidelberg (DE)*
1992-1998	**Diploma in Physics (MSc equiv.)**, *University of Heidelberg (DE)*

Awards & Publications

2013	**EPS HEPP Prize**, *as member of CMS collaboration at CERN, for the discovery of the Higgs boson*
1998-	**More than 450 scientific publications, h-index of 165** For details, see https://fpschill.github.io/publications/

Recent Research Grants

2025	"SCRAI: A Think-and-Do-Tank for Responsible Development and Societal Alignment of AIS", DIZH, 2 MCHF
2025	"AMR: Digitalizing the fight against antibiotic resistances", DIZH with UZH, 300 KCHF
2022	"certAInty: A certification scheme for AIS", Innosuisse with CertX AG, 600 KCHF
2022	"SKACH: Swiss Participation in the Square Kilometre Array Observatory (SKAO)", SERI (CH consortium)
2021	"AC3T", Innosuisse with Varian Medical Systems, 785 KCHF

Project Management

2019-	**Project manager**, *Applied Deep Learning*, ZHAW CAI Project management for various 3rd party funded research projects in the domain of AI, Deep Learning, Computer Vision and MLOps; Financial planning and reporting; IP contracts

2010-2011	**Programme coordinator "Top Quark Physics"**, *CMS experiment*, CERN
	Led 1 out of 7 physics working groups (100+ members) of the collaboration; strategic planning, scheduling and execution of analysis of first LHC data; assessment and quality control; orchestrating of publications; reporting to management
2006-2007	**Project leader "Silicon tracker alignment"**, *CMS experiment*, CERN
2003-2004	**Trigger coordinator**, *H1 experiment*, DESY
2001-2003	**Physics group coordinator**, *H1 experiment*, DESY

Research Infrastructure

2023-	**Expert group member**, *Data Ethics, Big Data & AI, data innovation alliance*
2022-	**Coordinator**, *PhD Programme in Data Science between ZHAW and University of Zurich*
2022-2024	**Head**, *Continuing Education, ZHAW Centre for AI*
2019-	**Main organizer**, *CAI colloquium and Datalab seminar*, ZHAW
	Regular seminars on data science topics with internal and external speakers
2019-	**Advisory board member**, *Breakout group DIZH fellowships*, ZHAW digital
2011-2014	**Co-founder**, *WG on Top Quark Physics at LHC*, LHC Physics Center at CERN (LPCC)
	Transnational group of experts discussing scientific topics at the forefront of research in top quark physics
2008-2014	**Coordinator**, *Top Quark Physics WG*, Helmholtz Alliance *Physics at the Terascale*
	The "Terascale" Alliance bundles German activities in the field of high-energy collider physics.
2008-2012	**Advisory board member**, *DESY scientific board (DESY WA)*, DESY
	DESY WA is a committee which advises the DESY directorate in matters of research policy

Workshop and Conference Organization

2021	ISSDS 2021, Intl. Symposium on the Science of Data Science, ZHAW/Online (co-organizer)
2020	ANNPR 2020, 9th IAPR Workshop on Artificial NN's in Pattern Recognition, ZHAW/Online (chair)
2011, 2012	Helmholtz Alliance workshops on top quark physics, Wuppertal and Berlin (co-organizer)
2011	TOP 2011, 4th Intl. workshop on top quark physics, Sant Feliu de Guixols (IAC member)

Recent Teaching & Student supervision

Head of studies & Module Responsibility

2022-	Head of studies: MLOps, Computer Vision with Deep Learning, Generative AI in Teaching, CAS Advanced ML and MLOps, CAS Machine Intelligence

Teaching

2025-	"Machine Learning & Data in Operation" (MSc), ZHAW, Spring 24,25
2024-	"MLOps" (BSc & Cont. Edu.), ZHAW, Spring & Fall 24, Spring & Fall 25
2024-	"Computer Vision with Deep Learning" (BSc), ZHAW, Spring 24,25
2022-	"Deep Learning" (CAS Machine Intelligence), ZHAW, Fall 22,23,24,25
2019-2022	"Artificial Intelligence 1" (BSc), ZHAW, Fall 19,20,21,22

Student supervision

2001-	Supervision of 10 PhD students (AI/ML, computer vision; QCD, Top quark and Higgs physics)
2021-	Supervision of several MSc/MAS students (AI/ML, computer vision)

Networks

data innovation alliance, European Physical Society (EPS), German Physical Society (DPG), CAIRNE, ELLIS (supporter), ZHAW Datalab, ZHAW Digital Health Lab

Journals

Reviewer/PC member for EPIA 2022, CVPR 2022, AutoML 2022, ANNPR 2022, ISSDS 2021, ANNPR 2020
Reviewer/Guest Editor for IEEE Trans., Phys.Lett.B, Eur.Phys.J. C, JHEP, Int.J.Mod.Phys. A

Languages

German (native); English (business fluent); French (very good)