

Prof. Dr. Philipp Fürnstahl

Curriculum Vitae

Date of birth: 08.08.1978
Nationality: Swiss (Austrian until 2022)
Marital status: married, 1 child

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Research in Orthopedic Computer Science
University of Zurich

University Hospital Balgrist
Forchstrasse 340
CH-8008 Zurich, Switzerland

EDUCATION

2018	Postdoctoral Lecturer Qualification, Medical Faculty, University of Zurich
2006 – 2010	PhD, Computer Vision Laboratory, Dept. of Electrical Engineering, ETH Zurich
1996 – 2006	MSc, Technical Mathematics, Dept. of Mathematics, Technical University Graz, Austria

PROFESSIONAL EXPERIENCE

2021 –	Executive Board Member OR-X – Translational Center for Surgery, Zurich
2026 –	Associate Professor (tenure), University Hospital Balgrist, University of Zurich
2020 – 2026	Tenure-Track Assistant Professor, University Hospital Balgrist, University of Zurich
2019 –	Head 3D planning and printing center, University Hospital Balgrist
2014 – 2018	Founder and Director Balgrist CARD AG, Zurich
2012 –	Research Group Leader, University Hospital Balgrist
2010 – 2012	Software Developer and Project Manager, Siemens Schweiz AG, Zurich

INSTITUTIONAL RESPONSIBILITIES

2025 –	Excellence Program Selection Committee, Digital Society Initiative, Zurich
2024 –	Innovation Ambassador, University of Zurich
2024 –	Entrepreneurship Fellowship Jury, University of Zurich
2024 –	Research Commission, Medical Faculty, University of Zurich
2021 – 2023	Scientific Advisory Board Hochschulmedizin, University Medicine Zurich
2021 –	Teaching Commission, Medical Faculty, University of Zurich

TEACHING

2024 –	Module coordinator SurgeAHEAD Surgery Course, Medical Faculty (SEEQ: 4.9/5)
2023 –	Lecture in the Digital Health Track, Medical Faculty and Faculty of Sciences
2018 –	Lectures on Computer-Assisted Surgery, Envelope Study, Medical Faculty
2021 –	Lectures in the “Digitalisierungswoche” and “Fokuswoche Forschung”, Medical Faculty
2022	3 ECTS course on Computer-Aided Surgery, Informatics Institute, University of Zurich
2020	Instructional Course, SGOT Swiss Congress of Orthopedics, Basel

SUPERVISION

Graduated PhD Students: Aidana Massalimova (2025), Sascha Jecklin (2025, now AXA), Marco von Atzigen (2024; now Medivis), Tabitha Arn (2024; now Inselspital), Joelle Ackermann (2024), Florentin

Liebmann (2023; now Medivis), Matthias Seibold (2023; now ROCS), Fabio Carrillo (2019; now OR-X), Lazaros Vlachopoulos (2017; now Balgrist surgeon)

PhD Reporter/Examiner for Marco Kaiser (ETH, 2025), Ruixuan Li (KU Leuven, 2024), Najmeh Kheram (University of Zurich, 2024), Julian Wolf (ETH, 2022), David Hill (RMIT University Australia, 2021), Sebastiano Carprara (ETH, 2021) Guodong Zeng (University of Bern, 2020)

PUBLICATIONS

ORCID: 0000-0001-6484-6206

Over 170+ refereed publications including 10 MIA and 7 MICCAI publications, h-index = 35

EDITORIAL AND REVIEWING WORK

2025	Editor for Special Issue Robotics in Orthopedics and Neurosurgery, Frontiers
2021	Editor for Special Issue Medical Augmented Reality Summer School, MDPI

Reviewing in (selection) MICCAI, Medical Image Analysis, IEEE TBME, IJCARS, Computer Methods and Programs in Biomedicine, AI in Medicine, BMC Musculoskeletal Disorders, The International Journal of Medical Robotics and Computer Assisted Surgery, Nature Scientific Reports

CONFERENCE ORGANISATION

2025	Co-organizer NVIDIA MedTech meetup with 130 MedTech professionals, Zurich, CH
2025	Symposium Organizer in Annual Meeting of the EORS, Davos, CH
2024	Session Chair Human-Centric AI, ETH AI-X Summit, Zurich
2024	Session Chair Main Topic Robotics, SGOT Swiss Congress of Orthopedics, Lausanne, CH
2023	General Chair and Program Chair, Medical Augmented Reality Summer School, Zurich
2022	Session Chair, OTDigital, Berlin, Germany
2021	General Chair and Program Chair, Medical Augmented Reality Summer School, Zurich
2019	General Chair and Program Chair, Medical Augmented Reality Summer School, Zurich

INVITED TALKS

2025	Educational Talk for the Swiss Clinical Trial Organization, Online
2025	Wissen-schaf(f)t Wissen, Zurich, CH
2025	ETH AI-X Summit, Zurich, CH
2025	Educational Talk for the Cantonal Ethical Committee, Online
2025	Annual meeting of the Int. Society of CAOS, Davos, CH
2025	Interregional Surgery Forum, Zurich
2025	OTDigital, Berlin, Germany
2024	ETH AI-X Summit, Zurich
2024	Medical Augmented Reality Summer School, Suzhou, China
2024	Clinic Meets Data Science Symposium, Zurich
2024	SGS Swiss Spinal Surgery Annual Congress, Basel, CH
2024	Future OP, Vienna, Austria
2024	SGOT Swiss Congress of Orthopedics, Lausanne, CH
2024	Machine Intelligence in Clinical Neuroscience Symposium, Zurich
2023	Future OP, Berlin, Germany
2023	Stryker Inc., Freiburg, Germany
2023	Life Science Zurich Impact Conference, Zurich

2023	Arthrex Inc., Naples, USA
2023	Future OP, Zurich
2022	OTDigital, Berlin Germany
2022	Medacta Inc., Zurich
2022	Clinics meets Bioinformatics Symposium, Zurich
2021	Hospital Uster, Zurich
2021	Scientifica Opening Ceremony, Zurich
2020	Shift Medical, e-Congress
2020	Summer School in Biomedical Imaging, Zurich
2018	SGOT Swiss Congress of Orthopedics, Montreux, CH
2014	Rapid.Tech, Erlangen, Germany
2013	Rapid.Tech, Erlangen, Germany

AWARDS

2025	Winner KUKA innovation award, project Ultratopia with KU Leuven
2022	PhD team challenge award, University Medicine Zurich
2022	ESSKA Congress Best Paper Award for Lukas Jud
2021	IPCAI Honorary Mention for Jonas Hein
2020	EFORT Congress Best National Paper e-poster for Pascal Kiarostami

PATENTS

2024	WO2024165508A1 Computer method for processing anatomic imaging data
2022	EP3530217B1 Method for designing a registration instrument for osteosynthesis
2022	US20230245589A1 Computer method for assisting bending of a reinforcing rod

CHAIRMANSHIPS AND PROFESSIONAL MEMBERSHIPS

2023 –	President of the Board, X23D AG, Zurich
2023 –	Affiliated Professor Digital Society Initiative, Zurich
2022 –	Affiliated Professor ETH AI Center, Zurich
2020 –	Society Membership Medical Image Computing and Computer-Assisted Interventions
2018 –	Associate Member Swiss Society of Orthopedics and Traumatology