

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**
2020 – **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
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: 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 9 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, 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 Session Chair in European Orthopedic Research Society Meeting, 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

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

2024 –	Finalist KUKA Innovation Award
2022	PhD team challenge award, University Medicine Zurich
2022	ESSKA Congress 2022 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