

List of publications

Prof. Dr. Philipp Fürnstahl, updated in November, 2021

H-Index: 17 (Google scholar) / 15 (Scopus) / 14 (Web of Science)

Number of original publications as first author: 9

Number of original publications as last author: 37

Sum of the Times Cited: 667

ORIGINAL PAPERS

1. Ackermann J, Wieland M, Hoch A, Ganz R, Snedeker JG, Oswald MR, Pollefeys M, Zingg PO, Esfandiari H, Fürnstahl P. A New Approach to Orthopedic Surgery Planning Using Deep Reinforcement Learning and Simulation. *International Conference on Medical Image Computing and Computer-Assisted Intervention (MICCAI)*, 2021.
2. Seibold M, Hoch A, Suter D, Farshad M, Zingg PO, Navab N, Fürnstahl P. Acoustic-based spatio-temporal learning for pressfit evaluation of femoral stem implants. *International Conference on Medical Image computing and Computer-Assisted Intervention*, 2021.
3. Zaleski M, Hodel S, Fürnstahl P, Vlachopoulos L, Fucentese S. Osteochondral Allograft Reconstruction of the Tibia Plateau for Posttraumatic Defects – A Novel Computer-Assisted Method Using 3D Preoperative Planning and Patient-Specific Instrumentation. *The surgery Journal*, 2021. (7)4.
4. Farshad M, Miguel Spirig J, Suter D, Hoch A, Burkhard M, Liebmann F, Nadja Farshad N, Fürnstahl P. Operator independent reliability of direct augmented reality navigated pedicle screw placement and rod bending. *North American Spine Society Journal*, 2021. Accepted/in press.
5. Hodel S, Calek A, Fürnstahl P, Fucentese S, Vlachopoulos L. Accuracy of joint line restoration based on three-dimensional registration of the contralateral tibial tuberosity and the fibular tip. *Journal of Experimental Orthopaedics*, 2021. Accepted/in press.
6. Liebmann F, Stütz D, Suter D, Jecklin S, Snedeker J.G, Farshad M, Fürnstahl P, Esfandiari H. SpineDepth: A multi-modal data collection approach for automatic labelling and intraoperative spinal shape reconstruction based on RGB-D data. *Journal of Imaging*, 2021. Accepted/in press.

7. Spirig J, Roner S, Liebmann F, Fürnstahl P, Farshad M. Augmented reality-navigated pedicle screw placement: a cadaveric pilot study. *European Spine Journal*, 2021. Accepted/in press.
8. Kriechling P, Loucas R, Loucas M, Casari F, Fürnstahl P, Wieser K. Augmented reality through head-mounted display for navigation of baseplate component placement in reverse total shoulder arthroplasty: a cadaveric study. *Archives of Orthopaedic and Trauma Surgery*, 2021.
9. Hodel S, Mania S, Vlachopoulos L, Fürnstahl P, Fucentese S. Influence of femoral tunnel exit on the 3D graft bending angle in anterior cruciate ligament reconstruction. *Journal of Experimental Orthopaedics*, 2021. 8(44).
10. Hodel S, Zindel C, Jud L, Vlachopoulos L, Fürnstahl P, Fucentese S. Influence of medial open wedge high tibial osteotomy on tibial tuberosity–trochlear groove distance. *Knee Surgery, Sports Traumatology, Arthroscopy*, 2021.
11. Exner G.U, Dumont C.E, Walker J, Fürnstahl P. Cement Spacer formed in a 3-D-printed Mold for Endoprosthetic Reconstruction of an Infected Sarcomatous Radius. A Case Report. *Journal of Bone and Joint Surgery*, 2021. 11(2).
12. Farshad M, Fürnstahl P, Spirig J.M. First in man in-situ Augmented Reality pedicle screw navigation. *North American Spine Society Journal*, 2021. Accepted/in press.
13. Hein J, Seibold M, Bogo F, Farshad M, Pollefeys M, Fürnstahl P, Navab N. Monocular Markerless Tool-in-Hand-Tracking for Surgery. *Proceedings of IPCAI 2021: International Conference on Information Processing in Computer-Assisted Interventions*. Accepted/in press.
14. Roth T, Carrillo F, Wieczorek M, Ceschi G, Esfandiari H, Sutter R, Vlachopoulos L, Wein W, Fucentese S, Fürnstahl P. Three-dimensional preoperative planning in the weight-bearing state: validation and clinical evaluation. *Insights into Imaging*, 2021. 12(1), 1-11.
15. Hasler J, Hoch A, Fürnstahl P, Ackermann J, Zingg P. O, Vlachopoulos L. Is the contralateral lesser trochanter a reliable reference for planning of total hip arthroplasty—a 3-dimensional analysis. *BMC Musculoskeletal Disorders*, 2021. 22(1), 1-6.
16. Casari F. A, Roner S, Fürnstahl P, Nagy L, Schweizer A. Computer-assisted open reduction internal fixation of intraarticular radius fractures navigated with patient-specific instrumentation, a prospective case series. *Archives of Orthopaedic and Trauma Surgery*, 2021.
17. Zindel C, Fürnstahl P, Hoch A, Götschi T, Schweizer A, Nagy L, Roner S. Inter-rater variability of three-dimensional fracture reduction planning according to the

- educational background. *Journal of Orthopaedic Surgery and Research*, 2021. 16(1), 1-9.
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 19. Casari F.A., Navab N., Hruby L.A., Kriechling P, Nakamura R, Tori R, dos Santos Nunes F.L, Queiroz M.C, Frnstahl P, Farshad M. Augmented Reality in Orthopedic Surgery Is Emerging from Proof of Concept Towards Clinical Studies: a Literature Review Explaining the Technology and Current State of the Art. *Current Reviews in Musculoskeletal Medicine*, 2021. 14: 192-203.
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 21. Ackermann J, Liebmann F, Hoch A, Snedeker J.G, Farshad M, Rahm S, Zingg P.O, Frnstahl P. Augmented Reality Based Surgical Navigation of Complex Pelvic Osteotomies - A Feasibility Study on Cadavers. *Applied Sciences*, 2021. 11(3): 1228.
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 24. Beeler S, Leoty L, Hochreiter B, Carrillo F, Gtschi T, Fischer T, Frnstahl P, Gerber C. Similar scapular morphology in patients with dynamic and static posterior shoulder instability. *Journal of Shoulder and Elbow Surgery International*, 2020. 5(2):181-189.
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 26. Frnstahl P, Casari F, Ackermann J, Marcon M, Leunig M, Ganz, R. Computer-Assisted femoral head reduction osteotomies: An approach for anatomic reconstruction of severely deformed Legg-Calv-Perthes hips. A pilot study of six patients. *BMC Musculoskeletal Disorders*, 2020. 21 (Nr. 759).

27. Kiarostami P, Dennler C, Roner S, Sutter R, FÜRNSTAHL P, Farshad M, Rahm S, Zingg P. Augmented reality-guided periacetabular osteotomy – proof of concept. *Journal of Orthopaedic Surgery and Research*, 2020. 15 (540).
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33. Roner S, Schweizer A, Da Silva Y, Carrillo F, Nagy L, FÜRNSTAHL P. Accuracy and Early Clinical Outcome after 3-Dimensional Correction of Distal Radius Intra-Articular Malunions Using Patient-Specific Instruments. *Journal of Hand Surgery*, 2020. 45(10): 918-923.
34. Beeler S, Vlachopoulos L, Jud L, Sutter R, Götschi T, FÜRNSTAHL P, Fucentese S. Meniscus sizing using three-dimensional models of the ipsilateral tibia plateau based on CT scans – an experimental study of a new sizing approach. *Journal of Experimental Orthopaedics*, 2020. 7 (Nr. 36).
35. Dennler C, Jaberg L, Spirig J, Agten C, Götschi T, FÜRNSTAHL P, Farshad M. Augmented Reality based navigation increases precision of pedicle screw insertion. *Journal of Orthopaedic Surgery and Research*, 2020. 15 (Nr. 174).
36. Carrillo F, Suter S, Casari F.A, Sutter R, Nagy L, Snedeker J.G, FÜRNSTAHL P. Digitalization of the IOM: A comprehensive cadaveric study for obtaining three-

- dimensional models and morphological properties of the forearm's interosseous membrane. *Scientific Reports*, 2020. 10 (6401): 1-15.
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