

Stanford



Sulaiman Vesal

Research and Development Scientist and Engineer, Urology - Divisions

Bio

CURRENT ROLE AT STANFORD

Research and Development Scientist at Engineer at Urologic Cancer Innovation Lab, Urology Department.

HONORS AND AWARDS

- Fourth Place in the PI-CAI 2023 Grand Challenge (the only team from US), PI-CAI (2023)
- Second Place in the Learn2Reg Grand Challenge, MICCAI (2021)
- Second Place in the Multi-sequence Cardiac MR Segmentation Challenge (MS-CMRSeg), MICCAI-STACOM (2019)
- Second Place in the Atrial Segmentation Challenge, MICCAI-STACOM (2018)
- Graduate School Scholarship Programme (GSSP) Recipient, German Academic Exchange Service (DAAD) (2016)
- SAARC India Silver Jubilee Scholarships Recipient, SARRC (2011)

EDUCATION AND CERTIFICATIONS

- PhD, Friedrich-Alexander-Universität Erlangen-Nürnberg , Medical Engineering (2021)
- M.Sc., South Asian University , Computer Science (2013)
- B.Sc., Kabul University , Computer Science (2010)

LINKS

- LinkedIn: <https://www.linkedin.com/in/sulaimanvesal/>
- Twitter: https://twitter.com/sulaiman_svesal
- Google Scholar: <https://scholar.google.co.in/citations?user=SQOL8eYAAAAJ&hl=en&inst=5746887945952177237&oi=ao>
- Lab Site: <https://med.stanford.edu/ucil.html>

Professional

WORK EXPERIENCE

- Research Data Scientist - University of California San Francisco (UCSF) (8/1/2020 - 2/28/2021)

Publications

PUBLICATIONS

- **Learn2Reg: Comprehensive Multi-Task Medical Image Registration Challenge, Dataset and Evaluation in the Era of Deep Learning** *IEEE TRANSACTIONS ON MEDICAL IMAGING*
Hering, A., Hansen, L., Mok, T. W., Chung, A. S., Siebert, H., Hager, S., Lange, A., Kuckertz, S., Heldmann, S., Shao, W., Vesal, S., Rusu, M., Sonn, et al

2023; 42 (3): 697-712

- **The Association of Tissue Change and Treatment Success During High-intensity Focused Ultrasound Focal Therapy for Prostate Cancer.** *European urology focus*
Khandwala, Y. S., Soerensen, S. J., Morisetty, S., Ghanouni, P., Fan, R. E., Vesal, S., Rusu, M., Sonn, G. A.
2022
- **A review of artificial intelligence in prostate cancer detection on imaging.** *Therapeutic advances in urology*
Bhattacharya, I., Khandwala, Y. S., Vesal, S., Shao, W., Yang, Q., Soerensen, S. J., Fan, R. E., Ghanouni, P., Kunder, C. A., Brooks, J. D., Hu, Y., Rusu, M., Sonn, et al
2022; 14: 17562872221128791
- **Domain generalization for prostate segmentation in transrectal ultrasound images: A multi-center study.** *Medical image analysis*
Vesal, S., Gayo, I., Bhattacharya, I., Natarajan, S., Marks, L. S., Barratt, D. C., Fan, R. E., Hu, Y., Sonn, G. A., Rusu, M.
2022; 82: 102620
- **Cardiac segmentation on late gadolinium enhancement MRI: A benchmark study from multi-sequence cardiac MR segmentation challenge.** *Medical image analysis*
Zhuang, X., Xu, J., Luo, X., Chen, C., Ouyang, C., Rueckert, D., Campello, V. M., Lekadir, K., Vesal, S., RaviKumar, N., Liu, Y., Luo, G., Chen, et al
2022; 81: 102528
- **The Learn2Reg 2021 MICCAI Grand Challenge (PIMed Team)**
Shao, W., Vesal, S., Lim, D., Li, C., Golestani, N., Alsinan, A., Fan, R., Sonn, G., Rusu, M., Aubreville, M., Zimmerer, D., Heinrich, M.
SPRINGER INTERNATIONAL PUBLISHING AG.2022: 168-173
- **Deep learning based denoising of mammographic x-ray images: An investigation of loss functions and their detail-preserving properties**
Eckert, D., Ritschl, L., Herbst, M., Wicklein, J., Vesal, S., Kappler, S., Maier, A., Stober, S., Zhao, W., Yu, L.
SPIE-INT SOC OPTICAL ENGINEERING.2022
- **Adapt Everywhere: Unsupervised Adaptation of Point-Clouds and Entropy Minimisation for Multi-modal Cardiac Image Segmentation.** *IEEE transactions on medical imaging*
Vesal, S., Gu, M., Kosti, R., Maier, A., Ravikumar, N.
2021; PP
- **A global benchmark of algorithms for segmenting the left atrium from late gadolinium-enhanced cardiac magnetic resonance imaging.** *Medical image analysis*
Xiong, Z., Xia, Q., Hu, Z., Huang, N., Bian, C., Zheng, Y., Vesal, S., Ravikumar, N., Maier, A., Yang, X., Heng, P. A., Ni, D., Li, et al
2021; 67: 101832
- **Spatio-temporal Multi-task Learning for Cardiac MRI Left Ventricle Quantification.** *IEEE journal of biomedical and health informatics*
Vesal, S., Gu, M., Maier, A., Ravikumar, N.
2020; PP
- **Fully Automated 3D Cardiac MRI Localisation and Segmentation Using Deep Neural Networks** *JOURNAL OF IMAGING*
Vesal, S., Maier, A., Ravikumar, N.
2020; 6 (7)
- **Implementation of machine learning into clinical breast MRI: Potential for objective and accurate decision-making in suspicious breast masses.** *PloS one*
Ellmann, S., Wenkel, E., Dietzel, M., Bielowski, C., Vesal, S., Maier, A., Hammon, M., Janka, R., Fasching, P. A., Beckmann, M. W., Schulz Wendtland, R., Uder, M., Bäuerle, et al
2020; 15 (1): e0228446
- **Classification of Breast Cancer Histology Images Using Transfer Learning**
Vesal, S., Ravikumar, N., Davari, A., Ellmann, S., Maier, A., Campilho, A., Karray, F., Romeny, B. T.
SPRINGER INTERNATIONAL PUBLISHING AG.2018: 812–19
- **A Multi-task Framework for Skin Lesion Detection and Segmentation**
Vesal, S., Patil, S., Ravikumar, N., Maier, A. K., Stoyanov, D., Taylor, Z., Sarikaya, D., McLeod, J., Ballester, M. A., Codella, N. C., Martel, A., Maier-Hein, L., Malpani, et al
SPRINGER INTERNATIONAL PUBLISHING AG.2018: 285–93