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<span class='anchor' id='biography'>

**# Biography**

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&emsp;&emsp;Sukun Tian received the Ph.D. degree in Manufacture Engineering of Aeronautics and Astronautics from Nanjing University of Aeronautics and Astronautics, Nanjing, China, in 2020, and Post-Doctoral Fellow in School of Mechanical Engineering, Shandong University, Jinan, China, in 2023.

He is currently an Assistant Professor/Associate Researcher and PhD Supervisor with Center of Digital Dentistry from Peking University School and Hospital of Stomatology. Dr. Tian has authored or co-authored over 40 peer-reviewed papers in journals and conferences (e.g., IEEE TMI/ JBHI/ TIM, Mater. Design., AAAI). His current research interests cover a wide range of topics related with biomedical engineering, medical image analysis, intelligent manufacturing, artificial intelligence (AI) techniques in healthcare and medicine applications.

&emsp;&emsp;田素坤，工学博士（后），北京大学口腔医学院数字化研究中心副研究员、博士生导师，北大医学-南京前知口腔智能设计制造联合实验室副主任、中国医疗器械行业协会口腔科设备及材料专业委员会特聘专家顾问。主要从事医学人工智能诊断与仿生设计智造技术等研究。2020年于南京航空航天大学获工学博士学位，2020年至2023年任山东大学博士后研究员，2022年南京航空航天大学优秀博士学位论文获得者。目前主持在研国家重点研发计划课题、国家自然科学基金青年项目、北京市自然科学基金等4项；迄今已在国内外刊物上发表论文40余篇，其中以第一/通讯作者在IEEE Trans. Med. Imag.（Q1-TOP, IF: 10.6, 1/58）、IEEE J. Biomed. Health Informat.（Q1-TOP, IF:7.7, 4/50）医工交叉领域权威期刊上发表SCI/EI论文20篇，ESI高被引论文1篇；长期担任IEEE TMI、IEEE JBHI、IEEE TIM.等国际期刊审稿人，并应邀担任国际SCI期刊Sensors和国际会议PRAI 2023客座编辑（Guest Editor）；申请中国发明专利9项（授权4项）、软件著作权1项；荣获第48届日内瓦国家发明展金奖（4/13）、中国研究生电子设计竞赛华东赛区一等奖、湖南省研究生创新论坛优秀论文一等奖等10余项。

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<span class='anchor' id='news'>

**# News**

<div style="width: 1000px; height:250px; overflow: auto; font-family: 'Times New Roman', Times, serif;">

 <ul>

      <li>[2024.04.01] <strong>Sukun Tian</strong>, Miaohui Wang, Fulai Yuan, Ning Dai, Yuchun Sun\*, Wuyuan Xie, Jing Qin. Efficient computer-aided design of dental inlay restoration: A deep adversarial framework. IEEE Transactions on Medical Imaging, 2021, 40(9): 2415-2427. (JCR Q1-Top, IF: 11.037).  </li>

      <li>[2024.03] <strong>Sukun Tian</strong>, Miaohui Wang, Fulai Yuan, Ning Dai, Yuchun Sun\*, Wuyuan Xie, Jing Qin. Efficient computer-aided design of dental inlay restoration: A deep adversarial framework. IEEE Transactions on Medical Imaging, 2021, 40(9): 2415-2427. (JCR Q1-Top, IF: 11.037).  </li>

      <li>[2024.02] <strong>Sukun Tian</strong>,, Miaohui Wang, Ning Dai, Haifeng Ma, Linlin Li, Luca Fiorenza, Yuchun Sun\*, Yangmin Li. DCPR-GAN: Dental crown prosthesis restoration using two-stage generative adversarial networks. IEEE Journal of Biomedical and Health Informatics, 2022, 26(1): 151-160. (JCR Q1-Top, IF: 7.021).</li>

      <li>[2024.00] <strong>Sukun Tian</strong>,, Pan Huang, Haifeng Ma, Jilai Wang, Xiaoli Zhou, Silu Zhang, Jinhua Zhou, Renkai Huang, Yangmin Li. CASDD: Automatic surface defect detection using a complementary adversarial network. IEEE Sensors Journal, 2022, 22(20): 19583–19595. (JCR Q1-Top, IF: 4.325).  </li>

      <li>[]<strong>Sukun Tian</strong>,, Ning Dai, Xiaosheng Cheng, Linlin Li, Yuchun Sun\*, Haihua Cui. Relative trajectory-driven virtual dynamic occlusal adjustment for dental restorations. Medical & Biological Engineering & Computing, 2019, 57(1): 59-70. (JCR Q2, IF: 3.079).  </li>

      <li>[]<strong>Sukun Tian</strong>,, Ning Dai, Linlin Li, Weiwei Li, Yuchun Sun\*, Xiaosheng Cheng. Three-dimensional mandibular motion trajectory-tracking system based on BP neural network. Mathematical Biosciences and Engineering, 2020, 17(5): 5709-5726. (JCR Q3, IF: 2.194). </li>

      <li>[]<strong>Sukun Tian</strong>,, Renkai Huang, Zhenyang Li, Luca Fiorenza, Ning Dai, Yuchun Sun, Haifeng Ma. A dual-discriminator adversarial learning approach for dental occlusal surface reconstruction. Journal of Healthcare Engineering, 2022, Article ID: 1933617. (JCR Q2, IF: 3.822).   </li>

      <li>[]<strong>Sukun Tian</strong>,, Ning Dai, Bei Zhang, Fulai Yuan, Qing Yu, Xiaosheng Cheng. Automatic classification and segmentation of teeth on 3D dental model using hierarchical deep learning networks. IEEE Access, 2019, 7: 84817-84828. (JCR Q2, IF: 3.476).</li>

      <li>[]<strong>Sukun Tian</strong>,, Ning Dai, Bei Zhang, Fulai Yuan, Qing Yu, Xiaosheng Cheng. Automatic classification and segmentation of teeth on 3D dental model using hierarchical deep learning networks. IEEE Access, 2019, 7: 84817-84828. (JCR Q2, IF: 3.476).</li>

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<span class='anchor' id='interests'>

**# Research Interests**

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[AI-aided Intelligent Extraction of Dental Features](https://www.sciencedirect.com/science/article/abs/pii/S1746809422004530)

AI-aided teeth feature intelligent extraction is an innovative research integrating artificial intelligence technology with the dental field. Its objective is to utilize computer vision and machine learning algorithms to automatically identify and extract key features from dental images, such as tooth morphology, position, and spacing. This facilitates rapid and accurate assistance for dental diagnosis and treatment, promoting the intelligent and precise development of dental healthcare.

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<div class='paper-box'><div class='paper-box-image'><div>

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[AI-aided Intelligent Design and Manufacturing of Dental Prosthesis](https://ieeexplore.ieee.org/abstract/document/9422832)

AI-aided Prosthesis Intelligent Design and Manufacturing is a cutting-edge topic that combines artificial intelligence with prosthetic dentistry. It aims to leverage AI algorithms to optimize the design process of dental prostheses, such as crowns, bridges, and dentures, based on individual patient data and requirements. By integrating AI into the manufacturing process, it enables the production of customized prosthetic devices with improved accuracy, fit, and functionality. This innovative approach promises to revolutionize the field of prosthodontics by streamlining workflow, enhancing patient outcomes, and advancing the overall quality of dental care.

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<div class='paper-box-text' markdown="1">

[AI-aided Medical Image Intelligent Diagnosis](https://ieeexplore.ieee.org/abstract/document/9868801)

AI-aided Medical Image Intelligent Diagnosis is an emerging field at the intersection of artificial intelligence and healthcare. It involves the application of advanced machine learning and computer vision techniques to analyze medical images, such as X-rays, MRIs, and CT scans, for accurate and efficient diagnosis of various diseases and conditions. By training AI models on vast amounts of annotated medical image data, these systems can recognize patterns and abnormalities that may be imperceptible to the human eye, assisting healthcare professionals in making timely and precise diagnoses. This technology holds great promise in improving diagnostic accuracy, reducing interpretation time, and ultimately enhancing patient care across diverse medical specialties.

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<span class='anchor' id='publications'>

**# Publications**

**\*\*Note\*\***:\* Corresponding author, # Co-first authors.

**## \*\*2024\*\***

- Cheng Li, Yaming Jin, Yunhan Du, Kaiyuan Luo, Luca Fiorenza, Hu Chen\\*, **\*\*Sukun Tian\\*\*\***, Yuchun Sun\\*, [Efficient complete denture metal base design via a dental feature-driven segmentation network. Computers in Biology and Medicine, 2024, 175: 108550.](https://www.sciencedirect.com/science/article/pii/S0010482524006346)

- Hongyan Wang, Hu Chen, **\*\*Sukun Tian\*\***, Yuchun Sun, Feng Wu, [Quantitative evaluation of the proximal contact area gap change characterization under intercuspal occlusion by intraoral 3D scanning: Food impaction with tight proximal contact. Journal of Esthetic and Restorative Dentistry, 2024, Doi.org/10.1111/jerd.13240.](https://onlinelibrary.wiley.com/doi/abs/10.1111/jerd.13240)

- Pan Huang, Chentao Li, Peng He, Hualiang Xiao, Yifang Ping, Peng Feng, **\*\*Sukun Tian\*\***, Hu Chen, Francesco Mercaldo, Antonella Santone, Hui-yuan Yeh, Jing Qin, [MamlFormer Priori-experience Guiding Transformer Network via Manifold Adversarial Multi modal Learning for Laryngeal Histopathological Grading, Information Fusion](https://doi.org/10.1016/j.inffus.2024.102333)

- Pan Huang, Hualiang Xiao, Peng He\\*, Chentao Li, Xiaodong Guo, **\*\*Sukun Tian\\*\*\***, Peng Feng\\*, Hu Chen, Yuchun Sun, Francesco Mercaldo, Antonella Santone, Jing Qin. [LA-ViT: A Network with Transformers Constrained by Learned-Parameter-Free Attention for Interpretable Grading in a New Laryngeal Histopathology Image Dataset, IEEE Journal of Biomedical and Health Informatics, 2024, DOI 10.1109/JBHI.2024.3373438](https://ieeexplore.ieee.org/abstract/document/10460116/)

- Wang Miaohui\\*, Yue Guanghui, Xiong Jian, **\*\*Tian Sukun\\*\*\***, [Intelligent Point Cloud Processing, Sensing, and Understanding. Sensors, 2024, 24(1): 283.](https://www.mdpi.com/1424-8220/24/1/283)

**## \*\*2023\*\***

- Pan Huang, Peng He, **\*\*Sukun Tian\\*\*\***, Mingrui Ma, Peng Feng\\*, Hualiang Xiao\\*, Francesco Mercaldo, Antonella Santone, Jing Qin. [A ViT-AMC network with adaptive model fusion and multiobjective optimization for interpretable laryngeal tumor grading from histopathological images. IEEE Transactions on Medical Imaging, 2023, 42(1): 15-28](https://ieeexplore.ieee.org/abstract/document/9868801/)

- Renkai Huang, Ning Dai, Chunrong Pan, Youwen Yang\\*, Xiaotong Jiang, **\*\*Sukun Tian\\*\*\***, Zhe Zhang. [Grid-tree composite support structures for lattice parts in selective laser melting. Materials & Design, 2023, 225: 111499.](https://www.sciencedirect.com/science/article/pii/S0264127522011224)

- Xinze Shen, Changdong Zhang, Xiuyi Jia, Dawei Li, Tingting Liu\\*, **\*\*Sukun Tian\\*\*\***, Wei Wei, Yuchun Sun, Wenhe Liao\\*. [TranSDFNet: Transformer-based truncated signed distance fields for the design of RPD clasps. IEEE Journal of Biomedical and Health Informatics, 2023, 27(10): 4950 - 4960.](https://ieeexplore.ieee.org/abstract/document/10188897/)

- Jiayang Luo, Pan Huang, Peng He, Biao Wei, Xiaodong Guo, Hualiang Xiao, Yuchun Sun, **\*\*Sukun Tian\\*\*\***, Mi Zhou\\*, Peng Feng\\*. [DCA-DAFFNet: An End-to-end Network with Deformable Fusion Attention and Deep Adaptive Feature Fusion for Laryngeal Tumor Grading from Histopathology Images. IEEE Transactions on Instrumentation and Measurement, 2023, 72: 5031115.](https://ieeexplore.ieee.org/abstract/document/10298268/)

- Yifang Ke, Yaopeng Zhang, **\*\*Sukun Tian\\*\*\***, Hu Chen\\*, Yuchun Sun\\*. [Accuracy of digital implant impressions using a novel structured light scanning system assisted by a planar mirror in the edentulous maxilla: An in vitro study. Clinical Oral Implants Research. 2023 Nov 6. Doi: 10.1111/clr.14208.](https://onlinelibrary.wiley.com/doi/abs/10.1111/clr.14208)

- Pan Huang, Xiaoli Zhou, Peng Feng, Peng He, **\*\*Sukun Tian\*\***, Yuchun Sun, Francesco Mercaldo, Antonella Santone, Jing Qin, Huanliang Xiao. [Interpretable laryngeal tumor grading of histopathological images via depth domain adaptive network with integration gradient CAM and priori experience-guided attention. Computers in Biology and Medicine, 2023, 154: 106447.](https://www.sciencedirect.com/science/article/pii/S0010482522011556)

- Yujun Wang, Furong Luo, Xing Yang, Qiushi Wang, Yunchun Sun, **\*\*Sukun Tian\*\***, Peng Feng, Pan Huang, Hualiang Xiao. [The Swin‑Transformer network based on focal loss is used to identify images of pathological subtypes of lung adenocarcinoma with high similarity and class imbalance. Journal of Cancer Research and Clinical Oncology, 2023.](https://link.springer.com/article/10.1007/s00432-023-04795-y)

- Jinhua Zhou, Haifeng Ma, Shan Jia, **\*\*Sukun Tian\*\***. [Mechanical properties of multilayer combined gradient cellular structure and its application in the WLL. Heliyon, 2023, 9(4): e14825.](https://www.cell.com/heliyon/pdf/S2405-8440(23)02032-7.pdf)

- Wuyuan Xie, Shukang Wang, **\*\*Sukun Tian\*\***, Lirong Hunag, Ye Liu, Miaohui Wang. [Just noticeable visual redundancy forecasting: A deep multimodal-driven approach. Proceedings of the AAAI Conference on Artificial Intelligence. 2023.](https://ojs.aaai.org/index.php/AAAI/article/view/25399)

- 黄盼, 何鹏, 杨兴, 罗家洋, 肖华亮\\*, **\*\*田素坤\\*\*\***, 冯鹏\\*. [基于自适应融合和显微成像的乳腺肿瘤分级网络. 光电工程，2023, 50(1): 220158.](https://www.researching.cn/ArticlePdf/m00029/2023/50/1/220158.pdf)

**## \*\*2022\*\***

- **\*\*Sukun Tian\*\***, Miaohui Wang, Ning Dai\\*, Haifeng Ma\\*, Linlin Li, Luca Fiorenza, Yuchun Sun\\*, Yangmin Li. [DCPR-GAN: Dental crown prosthesis restoration using two-stage generative adversarial networks. IEEE Journal of Biomedical and Health Informatics, 2022, 26(1): 151-160.](https://ieeexplore.ieee.org/abstract/document/9568708/)

- **\*\*Sukun Tian\*\***, Miaohui Wang, Haifeng Ma\\*, Pan Huang, Ning Dai, Yuchun Sun\\*, Jianjun Meng. [Efficient tooth gingival margin line reconstruction via adversarial learning. Biomedical Signal Processing and Control, 2022, 78: 103954.](https://www.sciencedirect.com/science/article/pii/S1746809422004530)

- **\*\*Sukun Tian\*\***, Pan Huang, Haifeng Ma\\*, Jilai Wang, Xiaoli Zhou, Silu Zhang, Jinhua Zhou, Renkai Huang, Yangmin Li. [CASDD: Automatic surface defect detection using a complementary adversarial network. IEEE Sensors Journal, 2022, 22(20): 19583–19595. ](https://ieeexplore.ieee.org/abstract/document/9875035/)

- **\*\*Sukun Tian\*\***, Renkai Huang, Zhenyang Li, Luca Fiorenza, Ning Dai, Yuchun Sun, Haifeng Ma\\*. [A dual-discriminator adversarial learning approach for dental occlusal surface reconstruction. Journal of Healthcare Engineering, 2022, Article ID: 1933617.](https://www.hindawi.com/journals/jhe/2022/1933617/)

- Xiaoli Zhou, Chaowei Tang\\*, Pan Huang\\*, **\*\*Sukun Tian\\*\*\***, Francesco Mercaldo, Antonella Santone. [ASI-DBNet: An adaptive sparse interactive resnet-vision transformer dual-branch network for the grading of brain cancer histopathological images. Interdisciplinary Sciences-Computational Life Sciences, 2022. DOI: 10.1007/s12539-022-00532-0.](https://link.springer.com/article/10.1007/s12539-022-00532-0)

- Jinhua Zhou, Haifeng Ma\\*, Jinbao Chen, Shan Jia, **\*\*Sukun Tian\*\***. [Motion characteristics and gait planning methods analysis for the walkable lunar lander to optimize the performances of terrain adaptability. Aerospace Science and Technology, 2022, 132: 108030.](https://www.sciencedirect.com/science/article/pii/S1270963822007040)

- 杨俊铄, 戴宁\*, **\*\*田素坤\*\***, 俞青, 程筱胜. [利用三维深度神经网络提取个性化牙弓线. 计算机辅助设计与图形学学报, 2022, 34 (5): 811-820.](https://search.ebscohost.com/login.aspx?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=10039775&AN=158700959&h=LXpCu6oP9%2BS%2FjT6tCM8jkE6Mmt5albjyiFcv4vEy0hl%2BccZ0D8YrXnsCH2mIUID4AMBG9GMFFcXap0ejanjHdg%3D%3D&crl=c)

- 郭闯, 戴宁\\*, **\*\*田素坤\*\***, 孙玉春, 俞青, 刘浩, 程筱胜. [高分辨率深度生成网络驱动缺失牙体形态设计. 中国图象图形学报, 2020, 25 (10): 2249-2258. ( CCF-B类重点北大核心). ](http://www.cjig.cn/jig/article/html/20201026)

**## \*\*2021\*\***

- **\*\*Sukun Tian\*\***, Miaohui Wang, Fulai Yuan, Ning Dai\\*, Yuchun Sun\\*, Wuyuan Xie\\*, Jing Qin. [Efficient computer-aided design of dental inlay restoration: A deep adversarial framework. IEEE Transactions on Medical Imaging, 2021, 40(9): 2415-2427.](https://ieeexplore.ieee.org/abstract/document/9422832/)

- Haifeng Ma, Weixiang Liu, Yangmin Li, Zhanqiang Liu, **\*\*Sukun Tian\\*\*\***. [Saturated adaptive barrier sliding mode control with state-dependent uncertainty limit. IET Control Theory & Applications, 2021, 15(13): 1762-1768.](https://ietresearch.onlinelibrary.wiley.com/doi/abs/10.1049/cth2.12157)

- Chao Liu, Haifeng Ma\\*, **\*\*Sukun Tian\*\***, Yangmin Li. [Adaptive barrier sliding-mode control considering state-dependent uncertainty. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68(10): 3301-3305. ](https://ieeexplore.ieee.org/abstract/document/9382017/)

- Chao Liu, Yangmin Li, **\*\*Sukun Tian\*\***, Haifeng Ma\\*. [Disturbance compensation based discrete-time sliding mode control with a reference trajectory generator. International Journal of Control, Automation and Systems. 2021, 19(X): 1-7.](https://link.springer.com/article/10.1007/s12555-020-0940-5)

- Ganjun Xu, Ning Dai\\*, **\*\*Sukun Tian\*\***. [Principal stress lines-based design method of lightweight and low vibration amplitude gear web. Mathematical Biosciences and Engineering, 2021, 18(6): 7060-7075.](https://www.aimspress.com/aimspress-data/mbe/2021/6/PDF/mbe-18-06-351.pdf)

- Renkai Huang, Chunrong Pan, **\*\*Sukun Tian\\*\*\***. [Design optimization of support structures based on numerical simulation of the temperature fields in selective laser melting. 2021 IEEE International Conference on Networking, Sensing and Control, 2021, 1: 1-5. ](https://ieeexplore.ieee.org/abstract/document/9702179/)

- **\*\*田素坤\*\***, 戴宁\\*, 袁福来, 孙玉春, 俞青, 程筱胜. [基于生成对抗网络的缺失牙体功能性咬合面形态设计方法. 中国机械工程, 2021, 32(3): 331-340. ](https://search.ebscohost.com/login.aspx?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=1004132X&AN=149083731&h=rcq2Kt%2Byw7dh3cmVyAt48P4FJdXtlUvU1K7JRoKWuCj76hqGELQXzejjt70yLw7EhZiiYAx3RLNq30%2BsB73RBA%3D%3D&crl=c)

**## \*\*2020\*\***

- **\*\*Sukun Tian\*\***, Ning Dai\\*, Linlin Li, Weiwei Li, Yuchun Sun\\*, [Xiaosheng Cheng. Three-dimensional mandibular motion trajectory-tracking system based on BP neural network. Mathematical Biosciences and Engineering, 2020, 17(5): 5709-5726.](http://www.aimspress.com/fileOther/PDF/MBE/MBE-17-05-307.pdf)

- Fulai Yuan\#, Ning Dai\#, Sukun Tian\#,\\*, Bei Zhang, Yuchun Sun\\*, Qing Yu, Hao Liu. [Personalized design technique for the dental occlusal surface based on conditional generative adversarial networks. International Journal for Numerical Methods in Biomedical Engineering, 2020, 36(5): e3321.](https://onlinelibrary.wiley.com/doi/abs/10.1002/cnm.3321)

- **\*\*田素坤\*\***, 戴宁\\*, 袁福来, 张贝, 俞青, 程筱胜. [多级层次三维卷积神经网络的牙颌模型分割与识别技术. 计算机辅助设计与图形学学报, 2020, 32(8): 1218-1227.](https://search.ebscohost.com/login.aspx?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=10039775&AN=145468990&h=gP5xRgsOKwSE8ZmHfe0AxMBO8yH0CbJM%2FJnEs83oqjiv2MzkLpGcxxog9OVf9bTyZLGfyAN5NmL5RoqFwkqEug%3D%3D&crl=c)

- Linlin Li, Yuchun Sun\\*, Yong Wang, Weiwei Li, Ning Dai, **\*\*Sukun Tian\*\***, Haihua Cui. [Accuracy of a novel virtual articulator for recording three-dimensional dentition. International Journal of Prosthodontics, 2020, 33(4): 441-451.](https://ss.bjmu.edu.cn/Sites/Uploaded/File/2021/04/096375357635365546709905338.pdf)

- Jinyou Chen\\*, **\*\*Sukun Tian\*\***. [Equivalent Mechanical Model for Conducting Polypyrrole Actuator. Journal of Physics: Conference Series. IOP Publishing, 2020, 1605(1): 012095.](https://iopscience.iop.org/article/10.1088/1742-6596/1605/1/012095/meta)

**## \*\*2019\*\***

- **\*\*Sukun Tian\*\***, Ning Dai\\*, Xiaosheng Cheng, Linlin Li, Yuchun Sun\\*, Haihua Cui. [Relative trajectory-driven virtual dynamic occlusal adjustment for dental restorations. Medical & Biological Engineering & Computing, 2019, 57(1): 59-70.](https://link.springer.com/article/10.1007/s11517-018-1867-3)

- **\*\*Sukun Tian\*\***, Ning Dai\\*, Bei Zhang, Fulai Yuan, Qing Yu, Xiaosheng Cheng. [Automatic classification and segmentation of teeth on 3D dental model using hierarchical deep learning networks. IEEE Access, 2019, 7: 84817-84828.](https://ieeexplore.ieee.org/abstract/document/8743393/)

- Bei Zhang, Ning Dai\\*, **\*\*Sukun Tian\*\***, Fulai Yuan, Qing Yu. [The extraction method of tooth preparation margin line based on S-Octree CNN. International Journal for Numerical Methods in Biomedical Engineering, 2019, 35(10): e3241.](https://onlinelibrary.wiley.com/doi/abs/10.1002/cnm.3241)

- 袁福来, 戴宁,\\* **\*\*田素坤\*\***, 张贝, 孙玉春, 俞青, 刘浩. [采用条件生成式对抗网络的缺损牙全冠修复技术. 计算机辅助设计与图形学学报, 2019, 31(12): 2113-2120.](https://search.ebscohost.com/login.aspx?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=10039775&AN=145880763&h=NREi%2BjF0M6Ipfk4YRZ7OCYmzwR%2FqTaQZ%2BeXUl4ts9zu7dnwwrIfByLbgScC0tHq7vGEECbpyYQ7G0ug8algU6g%3D%3D&crl=c)

- 张贝, 戴宁\\*, **\*\*田素坤\*\***, 袁福来, 俞青. [结合稀疏八叉树卷积神经网络的牙齿预备体颈缘线提取方法. 计算机辅助设计与图形学学报, 2019, 31 (12): 2129-2135.](https://search.ebscohost.com/login.aspx?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=10039775&AN=145880764&h=nfic%2FHgMPZ%2FJafVuVtUrcwK5bMzKBfRdS2fYxQdLEDh%2F%2Bvq5LRLw%2Bpinate0jjtBimSWDM03n1UixO3a1mqEFQ%3D%3D&crl=c)

<span class='anchor' id='patents'>

**# Patents**

1.  马海峰, **\*\*田素坤\*\***, 李振洋, 刘战强, 宋清华, 王兵, 蔡玉奎, 王磊. 深度生成网络辅助的功能性全冠修复体形态生成方法: 中国, 授权号：ZL202110649958.3. （导师第一）

2.  陈金友, 胡巍, 廖金雄, **\*\*田素坤\*\***. 一种柔性仿生机械抓取装置: 中国, 授权号：ZL202010909342.0.

3.  **\*\*田素坤\*\***，孙玉春，周永胜，翟文茹. 基于分层特征级联融合策略的缺失牙形态重建方法及系统: 中国, 申请号：CN202310439858.7.

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7.  孙玉春;周永胜;李伟伟;陈虎;**\*\*田素坤\*\***;翟文茹. 一种颌位关系的数字测定方法与系统: 中国, 申请号：CN202310153271.X. 申请日期：2023-02-17

8.  孙玉春;周永胜;**\*\*田素坤\*\***;李骋;沈妍汝;唐宝;张晓辉;翟文茹. 一次性极薄牙贴面的制作方法. 申请(专利)号：CN202310250819.2. 申请日：2023-03-15

9.  孙玉春;周永胜;**\*\*田素坤\*\***;柯怡芳;江泳;范宝林;翟文茹. 医用照明装置、手术床、治疗椅,及照明控制器、方法和设备. 申请(专利)号：CN202311152946.5. 申请日：2023-09-07

<span class='anchor' id='honors'>

**# Honors and Awards**

- Gold Award 48th Geneva International Exhibition of Inventions 第48届日内瓦国家发明展金奖

- National Scholarship for Graduate Students 研究生国家奖学金

- First Prize, East China Division of the Chinese Graduate Electronic Design Competition 中国研究生电子设计竞赛华东赛区一等奖

- First Prize, Outstanding Paper at the Hunan Province Graduate Innovation Forum 湖南省研究生创新论坛优秀论文一等奖

<span class='anchor' id='projects'>

**# Projects**

- \[12/2023-11/2026\] 国家重点研发计划

- \[12/2023-12/2026\] 北京市自然科学基金海淀原始创新联合基金

- \[12/2023-12/2024\] 国家自然科学基金青年项目

<span class='anchor' id='services'>

**# Services**

- Long-term reviewer for journals such as Comput. Biol. Med. (JCR Q1, IF: 6.698), Int. J. Numer. Methods Biomed. Eng. (JCR Q2, IF: 2.648), Sci. Rep. (JCR Q2, IF: 4.996), IEEE Access (JCR Q2, IF: 3.476), etc.

- Distinguished Expert Consultant for the Dental Equipment and Materials Professional Committee of the China Medical Device Industry Association.

- Guest Editor for the Special Issue "Intelligent Point Cloud Processing, Sensing and Understanding" on the international journal Sensors (ISSN 1424-8220, Impact Factor: 3.847).

- Guest Editor for Special Session 4 - "Artificial Intelligence for Medical Image Processing" at the 2023 IEEE 6th International Conference on Pattern Recognition and Artificial Intelligence (PRAI 2023).