Curriculum Vitae

<table>
<tr><td rowspan="6">Personal Information</td><td>Name</td><td>Liu Zhifeng</td><td>Gender</td><td>Male</td><td rowspan="3">  </td></tr>
<tr><td>Academic Title</td><td colspan="3">Pro./Dr.</td></tr>
<tr><td>College</td><td colspan="3">Beijing University of Technology</td></tr>
<tr><td>Discipline</td><td colspan="4">Mechanical Engineering</td></tr>
<tr><td>Email</td><td colspan="4">lzf@bjut.edu.cn</td></tr>
<tr><td>Mail Add.</td><td colspan="4">100 Pingleyuan, Chaoyang District, Beijing 100124, China</td></tr>
<tr><td>Educational Background</td><td colspan="5">（03.2001） Title of Ph.D. The discipline of Mechanical design and theory College of Mechanical Engineering of the Northeastern University
（09.1995 – 03.1998）Master’s degree College of Mechanical Engineering of the Northeastern University
（09.1991 – 07.1995）Bachelor's Degree Harbin University of Science & Technology</td></tr>
<tr><td>Working Experience</td><td colspan="5">01.2020 – still Beijing University of Technology Vice director of Faculty of Materials and Manufacturing
05.2014-2020.01 Beijing University of Technology Deputy director of College of Mechanical Engineering & Applied Electronics Technology
06.2013–still Beijing University of Technology Professor of College of Mechanical Engineering and Applied Electronics Technology
04.2001 – 10.2002 Huawei Technologies Co. Ltd Project Manager</td></tr>
<tr><td>Research Interests</td><td colspan="5">Digital manufacturing technology of CNC machine tools,
Mechanical transmission and structural dynamics,
Robot and harmonic reducer,
Intelligent manufacture,
Bolt assembly technology</td></tr>
<tr><td>Major Publications*</td><td colspan="5">[1] Liu, ZF*, Guo, JY, Wang, YM, et al. Influence of rotational speed of a heavy-duty hydrostatic turret on bearing performance under tilt. Industrial Lubrication and Tribology, 2020, 72,5:575-579.
[2] Zhang, SZ; Kang, CF; Liu, ZF*, et al. A Product Quality Monitor Model with the Digital Twin Model and the Stacked Auto Encoder. IEEE Access, 2020, 8:113826-113836.
[3] Liu, ZF*, Zheng, MP, Yang, CB*, et al. Changing behavior of friction coefficient for high strength bolts during repeated tightening. Tribology International, 2020, 151: 106486.
[4] Xu, JJ, Liu, ZF, Yang, CB*, et al. A Pseudo-Distance Algorithm for Collision Detection of Manipulators Using Convex-Plane-Polygons-based Representation. Robotics and Computer-Integrated Manufacturing, 2020, 66: 101993.
[5] Xu, JJ, Liu, ZF, Zhang, CX, et al. Minimal distance calculation between the industrial robot and its workspace based on circle/polygon-slices representation. Applied Mathematical Modelling, 2020, 87: 691-710.
[6] Li, G, Liu, ZF*, Cai, LG, et al. Standing-Posture Recognition in Human-Robot Collaboration Based on Deep Learning and the Dempster-Shafer Evidence Theory. Sensors, 2020, 20(4):1158.</td></tr>
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	[7] Yang, CB, Hu, QS, Liu, ZF*, et al. Analysis of the Partial Axial Load of a Very Thin-Walled Spur-Gear (Flexspline) of a Harmonic Drive. International Journal of Precision Engineering and Manufacturing, 2020, 21(5):1-13. [8] Liu, ZF, Liu, MM, Zhang, CX*, et al. Molecular arrangement mechanisms within phosphate films on Ti6Al4V regulated by intermolecular forces based on sum frequency generation vibrational spectroscopy. Applied Surface Science, 2020, 521,146364. [9] Liu, ZF, Yan, J, Cheng, Q*, et al. The mixed production mode considering continuous and intermittent processing for an energy-efficient hybrid flow shop scheduling. Journal of Cleaner Production, 2020,246,119071. [10] Li, Y, Liu, ZF*, Wang, YZ, et al. Experimental study on behavior of time-related preload relaxation for bolted joints subjected to vibration in different directions. Tribology International, 2020, 142,106005. [11] Liu, ZF *, Jiang, K, Zhang, CX, et al. A stiffness model of a joint surface with inclination based on fractal theory. Precision Engineering-Journal of the International Societies for Precision Engineering and Nanotechnology, 2020, 62:47-61. [12] Liu ZF*, Zhang T, Zhao YS, et al. Time-varying stiffness model of spur gear considering the effect of surface morphology characteristics. Proceedings of the Institution of Mechanical Engineers Part C-Journal of Mechanical Engineering Science,2019,2:242-253. [13] Liu ZF*, Xu JJ, Yang CB, et al. A TE-E optimal planning technique based on screw theory for robot trajectory in workspace. Journal of Intelligent & Robotic Systems,2018,3-4:363-375. [14] Liu ZF*, Xu JJ, Cheng Q, et al. Rotation-joint stiffness modeling for industrial robots considering contacts. Progress in Mechanical Engineering,2018:8. [15] Liu ZF*, Xu JJ, Cheng Q, et al. Trajectory Planning with Minimum Synthesis Error for Industrial Robots Using Screw Theory, International Journal of Precision Engineering and Manufacturing,2018,2:183-193. [16] Liu ZF*, Wang, YM, Cai LG, et al. A review of hydrostatic bearing system: Researches and applications. Advances in Mechanical Engineering,2017. [17] Liu ZF*, Pan MH, Zhang AP, et al. Thermal characteristic analysis of high-speed motorized spindle system based on thermal contact resistance and thermal-conduction resistanc. International Journal of Advanced Manufacturing Technology,2015,9:1913-1926 [18] Liu ZF*, Wang YM, Cai LG, et al. Design and manufacturing model of customized hydrostatic bearing system based on cloud and big data technology. Interantional Journal of Advanced Manufacturning Technology,2015,1-4:261-273.
Research Projects*	**the national natural science foundation of China (2 projects), 863 projects (2 projects), National Science and Technology Major Projects (12 projects), and Beijing municipal commission of science and technology (5 projects)**
Professional Membership	1.Vice President of Beijing Electrical and Mechanical Industry Association (2018-present) 2.Vice President of Beijing Intelligent Manufacturing Innovation Alliance (2018-present) 3.Standing Committee Member of China mechanical engineering society group and intelligent integration technology branch (2017-present) 4.Vice director of key laboratory of digital design and testing technology for heavy machine tools in mechanical industry (2017-present) 5.Member of Mechanical industry automation branch of Chinese society of mechanical engineering committee (2015-present) 6.Director of Beijing key laboratory of advanced manufacturing technology (2015-present) 7.Member of Technical committee of engineering drawing system of China, committee (2013-present) 8.Committee member of Subcommittee on milling machines of the national technical committee on metal cutting machine tools of standardization administration of China(2013-present).

Potential Research Projects**	National Natural Science Foundation of China and National Science Center of Poland

* Please list achievements of recent 5 years

** This CV is intended to match Chinese and Polish Scientists within SPUC member universities, and Potential Research Projects is intended to apply for Sino-Polish or EU scientific cooperation projects.