CV

CHUNJIANG WANG

Blue-Sword R&D Centre¹
ZTE Co., Ltd., Nanjing 210012, CN
Department of Mechanical Engineering²
Xi'an Jiaotong University, Xi'an 710049, CN



Phone: +(86) 158-518-66727 | Web: https://chjwang1.github.io/c/
Email: wangchj0307@stu.xjtu.edu.cn | codyj.me@gmail.com

EDUCATION

M.S., Xi'an Jiaotong University

Mechanical Engineering

• GPA: 3.81/4.0 | Institute Rank: 2/37

IELTS: 7.0 (6.5/7.5/6/6) | GRE: 150/170/3.5

B.S., Nanjing University of Aeronautics and Astronautics

Airworthiness Management

Mechanical Engineering, minor

• GPA: 3.85/5.0 | Graduation Rank: 7/213

EXPERIENCE

ZTE Corporation	Nanjing, CN	
Team Leader, R&D, Supply Chain Group	07/2022 - present	
The University of Hong Kong	ong Kong Hong Kong, CN	
Research Assistant, Department of Mechanical Engineering	06/2021 - 08/2021	
Southern University of Science and Technology	Shenzhen, CN	
Analyst Trainee, Department of Physics	09/2021	
Kharkiv National University, Ukraine Kharkiv, U		
Exchange Student, School of Physics	06/2018 - 02/2019	

HONORS AND AWARDS

4	Excellent Graduation with Honor (Top 1%, XJTU)	2022
	Excellent Master Thesis (1%, top honor)	2022
	Excellent Postgraduate & Cadre (1%)	2021
	Excellent Graduate & Cadre (1%)	2019
4	Blue-sword Fellow Bonus (0.1% awardees, ZTE)	2022 - 2024
	Schlumberger National Fellowship (0.5%)	2021
	National Encouragement Scholarship	2020
	Recommended Postgraduate Scholarship (Exempt exam)	2019
	Outstanding Student Scholarship (7 times gained)	2016 - 2022
4	President Award, Global Open Competition (1%)	2024
	President Special Award, Efficiency Proposal Task	2023
	Golden Award, ZTE National Innovation Day (twice)	2023 - 2024
	Golden Award, National Competition 'Challenge Cup' (4/379)	2021
	Second Award, National Undergraduate Innovation Competition	2020
	Second Award, National Ministry of Education of Graduation Dissertation Competition	2019

FEATURED PUBLICATIONS

Peer-reviewed Articles

- [1] <u>Wang C</u>, Chen X*, Song Q, et al. Investment micro–casting 3D printed multi-metamaterial for programmable multimodal biomimetic electronics. *Device* (*CellPress*). 3, 100658 (2025).
- [2] Shi J*, Tong Z, **Wang C**, et al. Predictable thermoelectric performance of directly synthesized Bi_{0.5}Sb_{1.5}Te₃ using laser powder bed fusion additive manufacturing. *Ceram. Int.* 50, 2, 2921-2930 (2024).
- [3] Chen X*, Wen K, **Wang C**, et al. Enhancing mechanical strength of carbon fiber-epoxy interface through electrowetting of fiber surface. *Compos. Part B Eng.* 234, 109751 (2022).
- [4] Chen X*, Wen K, Cheng S, <u>Wang C</u>, et al. In-situ damage self-monitoring of fiber-reinforced composite by integrating self-powered ZnO nanowires decorated carbon fabric. *Compos. Part B Eng.* 248, 110368 (2023).

¹ Main, retain job and suspend the salary in 02/2025.

 $^{^{\}rm 2}$ RA, part-in-time from 09/2022.

Proceeding Reports

- [1] <u>Wang C</u>, Chen X*, Song Q, et al. Investment micro–casting 3D printed polymeric programmable metamaterials for biomimetic multimodal electronics. *ACS Fall 2025. Oral*, Washington, DC, USA, August 17-21st (2025).
- [2] <u>Wang C</u>, Chen X*, J Zhang, et al. Multimodal, neurological, programmable multi-metamaterial bioelectronics via investment micro-casting mediated 3D printing. International Workshop on Bionic Engineering & Plenary Meetings of ISO/TC 266 Biomimetics (*IWBE 2025. Oral*), Vienna, Austria, September 23-27th (2025).
- [3] <u>Wang C</u>, Shi J, Chen X*, et al. Rapid synthesis and fabrication of thermoelectric pile using laser-regulated forming technique. Proceedings of the 15th International Conference on Frontiers of Design and Manufacturing (*ICFDM 2022. Poster*), Changchun, Jilin, China, August 17-19th (2022).
- [4] <u>Wang C</u>, Niu W, Song Q, et al. 3D printed water–soluble UV photopolymer for flexible sensor with sacrificial scaffolds and indirect molding. Proceedings of The 16th IEEE International Conference on Nano/Micro Engineered & Molecular Systems (*IEEE NEMS 2021. Oral*), Xiamen, Fujian, China, pp. 478–479 (2021).
- [5] <u>Wang C</u>, Chen X*, Wang S, et al. Flexible high-performed piezoelectric nanocomposite and its structural application. Proceedings of the 14th International Conference on Frontiers of Design and Manufacturing (*ICFDM 2020. Poster*), Xi'an, Shaanxi, China, September 12-14th (2020).
- [6] <u>Wang C</u>, Tiniakov D*, Alex R, et al. Reliability simulation and optimization of multilayered pump system on the base of discrete-time Markov chain. Proceedings of the 5th International Conference on mechanical and equipment reliability design (*ICMER 2019. Oral*), Nanjing, Jiangsu, China, March 6-8th (2019).
- [7] Yang D*, Guan J, Wang C, et al. Intelligent upgrade and practice of the small batch, multiple varieties production for sever assembly and package in ZTE-Binjiang Factory. MBA Collection of Management Case Research Center of Guanghua School of Management (MBA E-cases 2024), PKU, Beijing, China, June 23rd (2024).

Licensed Nation Patents

- [1] Chen X*, **Wang C**, et al (*mentor Prof. Xiaoming Chen as the first author, similarly hereinafter*). A 3D pressure sensor based on 3D printing template method and its preparation method. CN-ZL:202011642025.3 (2022)
- [2] Chen X*, <u>Wang C</u>, et al. A discrete fabrication method of two-dimensional nano-aerogel with designable three-dimensional structure. CN-ZL:202110475777.3 (2022)
- [3] Chen X*, <u>Wang C</u>, et al. Anisotropic thermal conductive flexible piezoelectric sensor and its micro-fabrication. CN-ZL: 202110562500.4 (2021)
- [4] Chen X*, <u>Wang C</u>, et al. A novel forming method for metal-based metamaterial electronics based on indirect additive manufacturing. CN-ZL:202110562340.3 (2021)
- [5] Chen X*, <u>Wang C</u>, et al. A device and instructed method for solid-liquid exchange of residuals in micropores. CN-ZL: 2021105 81806.4 (2021)
- [6] Chen X*, <u>Wang C</u>, et al. A soluble photosensitive resin and its preparation and curing method for suppressing layer patterns. CN-ZL: 202011639304.4 (2021)
- [7] Chen X*, Wen K, **Wang C**, et al. A method for improving the performance of fiber resin-based composite material. CN-ZL: 202111023062.0 (2021)
- [8] Chen X*, Wen K, <u>Wang C</u>, et al. A method for preparing fiber composite material with high interface strength. CN-ZL:202111008986.3 (2021)
- [9] Chen X*, Wang S, Shao J. Wang C, et al. A method for preparing flexible transparent conductive thin films based on micro stereolithography technology. CN-ZL: 202011640019.4 (2021)

RESEARCH INTERESTS

- Bioelectronics: Self-powered and energy-conversion; Metamaterial (piezoelectrical); Soft matter. Soft Robot; Programmed and addressed devices; Interface strength; Cross-linking.
- Mechanics-driven: Fabrication, Printing (PµSL), and LIGA curing for force-sensors & actuators.

RESEARCH PROJECTS

[1] Flexible piezoelectric multi-metamaterial and biometric multimodal electronics.

XJTU

2019 - 2022

Master's Independent Project 1.

NSFC (No.52172098), mentors: Prof. Chen X, Shao J, and Nicolas F.

- Biometric design of serious piezoelectric lattices composed of skin-inspired axial and radial units.
- Higher-performed BNNS/CNT comfortable composites synthesis and characterization.
- Tailored gradient metamaterials properties optimization and achieved multimodal demonstration.
- Developed programmable devices with robust improvement in grasping and stiffness recognition. Published journal: [1]; Invited conferences: [1-4]; Patents: [1, 3].

Highlight research in media reports:

CellPress | mp.weixin.qq.com/s/JZcwoTF9 DqdBhmDQuCa8Q The Paper | m.thepaper.cn/newsDetail forward 29947549

Tencent News | news.gg.com/rain/a/20250116A078JY00?suid=&media_id=

[2] Soluble polymetric UV resin cross-scaled forming and error restrain.

HKU 2021

Master's Independent Project 2.

National Key R&D Program (2022GXLH-01-12), co-mentor: Prof. Lu Y.

- Developed cross-scaled cured features and assessed multi-FMs demolding with no damage.
- Resolved resin dissolution at ambiance temperature, COMSOL simulation and theoretical analysis of droplet electrowetting infiltration and replacement in ultra-hydronic wax channels.

Invited conference: [5]; Patents: [2, 4-6].

[3] Enhanced mechanism research of electro-alignment in epoxy lamination.

NUTU

2020

Master's Corporative Project with NUTU lab.

NSFC (No.52175544), co-mentors: Prof. Zhang J and He J.

- Analytical modal establishment and electric field simulation of Maxwell force driven G alignment.
- Experiments of interface reinforcement and toughening of the heterogeneous adhesion surfaces. Published journals: [3, 4]; Patents: [7, 8].

[4] Hybrid printed Bi₂Te₃ thermoelectric piles for energy conversion.

SUSTech

Master's Corporative Project with SUSTech lab.

2020

Operation funds of recruitment program (No.40021136100001), co-mentor: Prof. Shi J.

- Research of carrier-phonon decoupling theory; Thermoelectric composite synthesis.
- Conducted SLM of mixture powders; Properties simulation and Seebeck coefficient measurement. Published journal: [2]; Patent: [9].

[5] Reliability optimization and validation of dump mechanical design.

khNU

Bachelor's Graduation Task

2018 - 2019

- $Project\ of\ graduate\ academic\ training\ (No.190726\text{-BK}),\ mentor:\ Prof.\ Tiniakov\ D.$
- Reliability validation of multilayered pump system based on *Markov* chain.
- Achieved dynamic simulation via Adams and Abaqus of virtual prototyping; Invited conference: [6].

ADDITIONAL WORK EXPERIENCES

[1] NPI and equipment digital upgradation.

Nanjing, ZTE

Hosted R&D Project 2022 - present

- On-line multi-sensor analytical system architecture via host-PC and *Mitsubishi* integration.
- Screw machine design and control on *Simens* platform; Invited conference: [7].

[2] Presided over the application and approved biddings.

Shenzhen, ZTE

Associated Project Management

2023 - 2024

- Green & National Five-Star Site Factory upgraded and construction.
- WEF-Lighthouse Factory planned, automatic connected, and built in Penang, Malaysia.

TEACHING ASSISTANT

[1] 'The 13th Challenge Cup National Competition of Academic & Technological Works'

11/2021

- Assisted administration of Prof. Jie Zhang.
- First award (national); Outstanding award (provincial, Shaanxi).

[2] 'Fabrication and Applications of Flexible Electronic Devices'

03/2021

- Instructor: Prof. Xiaoming Chen (Spring 2021, XJTU).
- Credit 3; Class: 36 juniors; Website: gr.xitu.edu.cn/en/web/xiaomingchen/home

[3] 'Scientific Salon of Modern Mechanical Engineering Development'

09/2018

- Instructor: Prof. Dmytro Tiniakov (Fall 2018, KhNU).
- Credit 2; Class: 28 juniors; Website: cca.nuaa.edu.cn/t862/2018/1208/c9811a144768/page.htm

EXTRACURRICULAR PROGRAM

Person in Charge of Badminton Association.

2023 - 2024

Team golden medal in the 6th ZTE badminton competition (Spring 2023).

9th Chair of the Youth Volunteer Union of College.

2017 - 2019

Church worship, free blood donation, tree planting, and volunteer nursing.

SKILLS

Programming: Python (Conda learning) | C++, C# | MATLAB | GX-Works | TIA portal | LabView | Teach-Pendant. **Engineering:** CATIA, Pro/E, UG, SolidWorks, Rhino | Abaqus | COMSOL Multiphysics | Adams. **Illustrating:** C4D | 3DMax | InDesign | Origin | Office.