

Zehao Wang

Ph.D. Candidate in Computer Music
Department of Music
University of California, San Diego

Homepage: <http://musicgrad.ucsd.edu/~zehaowang>
Email: zehaowang@ucsd.edu, zehaowang.pku@gmail.com
Mobile: +1-858-625-1990, +86-17600734556

Education

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- | | |
|---|----------------------------|
| University of California, San Diego | La Jolla, CA, USA |
| • <i>Ph.D. candidate in computer music, Department of Music</i> | <i>Sep 2021 - now</i> |
| <i>Master of Arts in Music, Department of Music</i> | <i>Mar 2023</i> |
| • Ph.D. Committee: Thomas Erbe(Chair, Music), Miller Puckette(Music), Rand Steiger(Music), Xiaochuan Tian(Math), Stefan Bilbao(Music, University of Edingurgh) | |
| • Master Committee: Miller Puckette(Chair), Thomas Erbe, Tamara Smyth) | |
| Peking University | Beijing, China |
| • <i>Bachelor of Science, School of Mathematical Science</i> | <i>Sep 2017 - Jul 2021</i> |

Employment

Current Employment:

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| University of California, San Diego | La Jolla, CA, USA |
| • <i>Associate Instructor & Teaching Assistant, Department of Music</i> | <i>Sep 2021 - now</i> |
| X-Institute | Shenzhen, China |
| • <i>Host & Principal Instructor, Music Technology Program</i> | <i>Jun 2024 - now</i> |

Past Employment:

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| Apple | Cupertino, CA, USA |
| • <i>Research Intern</i> | <i>April 2023 - Sep 2023</i> |
| TikTok, ByteDance | Santa Clara, CA, USA |
| • <i>Research Intern</i> | <i>Jun 2022 - Sep 2022</i> |
| Yamaha | Japan |
| • <i>Research Intern</i> | <i>Mar 2022 - Jun 2022</i> |
| ByteDance | Beijing & Shanghai, China |
| • <i>Research Intern, AI Lab</i> | <i>Dec 2019 - Sep 2020, Nov 2020 - Mar 2021</i> |
| Microsoft | Beijing, China |
| • <i>Research Intern, Speech Group</i> | <i>Jun 2019 - Dec 2019</i> |

Visiting Position

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| CCRMA, Stanford University | Palo Alto, CA, USA |
| • Host <i>Julius Smith</i> | <i>April 2023 - now</i> |
| New York University Shanghai | Shanghai, China |
| • Host <i>Gus G. Xia</i> | <i>Aug 2019 - Sep 2019</i> |

Selected Honors and Awards

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- | | |
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| • UCSD Department of Music Diversity Funding Award | 2024 |
| • Outstanding Graduate, School of Mathematical Sciences, Peking University | 2021 |
| • China Mathematics Olympiad, Silver Medal | 2016 |

Publication List (Google Scholar)

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1. **Zehao Wang**, Han Zhang, Yifan Guo. **ModPhy: System Design for Real-time Modular Sound Synthesis with Physically-Modeled Objects**, in *Proceedings of the 2023 International Computer Music Conference (ICMC)*, 2023.
 2. Stefan Bilbao, Craig Webb, **Zehao Wang**, Michele Ducceschi. **Real-Time Gong Synthesis**, in *Proceedings of the 26th International Conference on Digital Audio Effects (DAFx)*, 2023.
 3. **Zehao Wang**, Miller Puckette. **A fast biharmonic solver for real-time music applications of the von-Kármán plate equation**, in *Proceedings of the 5th Stockholm Music Acoustic Conference (SMAC)*, 2023.

4. [Zehao Wang](#), Miller Puckette, Tom Erbe, Stefan Bilbao. **Real-Time Implementation of the Kirchhoff Plate Equation using Finite-Difference Time-Domain Methods on CPU**, in *Proceedings of the 2023 Sound and Music Computing Conference (SMC)*, 2023.
5. [Zehao Wang*](#), Jingru Li*, Xiaoou Chen, Zijin Li, Shicheng Zhang, Baoqiang Han, Deshun Yang. **Musical Instrument Playing Technique Detection Based on FCN: Using Chinese Musical Instruments as Examples**, *arXiv preprint: 1910.09021*, 2019.

Professional Service

- **Reviewer:** NIME
- **Membership:** AES, ICMA

Teaching

Teaching at UC San Diego

- Instructor:
 - MUS7, Music, Media, and Technology, 2024 Summer
- Teaching assistant:
 - COSMOS Cluster 9, Music and Technology, 2024 Summer
 - MUS15, Pop Music, 2024 Spring
 - MUS5R, Sound in Time, 2024 Winter
 - MUS126R, Blues: An Oral Tradition, 2023 Fall
 - MUS6, Electronic Music, 2022 Fall
 - MUS175, Musical Psychoacoustics, 2022 Spring
 - MUS174B, Audio & MIDI Techniques II, 2022 Winter
 - MUS174A, Audio & MIDI Techniques I, 2021 Fall

Invited Talks

Real-time sound synthesis for 2-D plates using FDTD methods

AIR Lab Seminar (Invited by <i>Xingjian Du</i>), University of Rochester	Mar 2024
Computer Music Seminar, UC San Diego	Oct 2023
CCRMA Guest Colloquium (Invited by <i>Julius Smith</i>), Stanford University	May 2023