



姚 琤 博士 / 副研究员

国家工业设计研究院（生态设计领域）副院长

教育部计算机辅助产品创新设计工程中心常务副主任

浙江大学国际合作设计分院执行院长

浙江大学软件学院信息产品设计系主任

兼任荷兰埃因霍温理工大学和英国诺丁汉大学特聘教授与博士生

导师，是美国卡内基梅隆大学 2015 访问学者、IBM 2014 访问学者。专业研究领域有人机交互、科技设计、工业设计、设计与产业政策、新产品开发、数字化艺术与设计。在国际会议与期刊发表论文 64 篇，其中 CCF A 类 25 篇。作为子课题负责人承担国家科技支撑计划项目课题 1 项、浙江省“领雁”研发攻关计划项目 1 项，作为技术骨干参与国家科技支撑计划项目 3 项、国家“863”自然科学基金项目 3 项、浙江省重大科技项目 1 项、浙江省科技计划项目 2 项。参与工信部、财政部工业设计政策咨询专项课题 2 项。申请国家专利 48 项，获得红点设计奖 6 项、iF 设计奖 12 项。设计项目获邀多次参展迪拜国际设计周、荷兰设计周、世界生态设计大会展、世界工业设计大会展。曾承担和指导飞利浦、海尔、卡西欧、现代汽车、诺基亚、中胤、公牛、骑客、奥普、玉立、金松、爱文等国内外企业的设计研发项目。

● 获奖与参展（2022-2021）

- 1) CO2 Recorder, 迪拜国际设计周, 2022
- 2) Air Defender, 荷兰设计周, 2022
- 3) StoryDrawer, 一个通过合作绘画支持儿童讲故事的 Child-AI 共创系统, 第三届中国研究生人工智能创新大赛全国一等奖, 2021 (中国学位与研究生教育学会、中国科协青少年科技中心主办)
- 4) 第三届中国研究生人工智能创新大赛, 优秀指导教师, 2021
- 5) 攀哒 panda, 国际用户体验创新大赛全国一等奖银奖&华为智慧生活创新奖, 2021 (UXPA)
- 6) 荧救-基于社区的志愿者院前急救响应服务平台, 国际用户体验创新大赛全国二等奖&最佳产品规划奖, 2021 (UXPA)
- 7) 点滴出行, 国际用户体验创新大赛全国二等奖&数字适老优胜奖, 2021 (UXPA)
- 8) P-Planet-针对丧宠用户情绪疏导的一站式服务设计, 国际用户体验创新大赛全国二等奖, 2021 (UXPA)
- 9) iPet-面向养宠者的宠物习惯养成与护养指南一站式产品, 国际用户体验创新大赛全国二等奖&最佳用户调研

奖, 2021 (UXPA)

- 10) ToLife, 迪拜国际设计周, 2021
- 11) Popo, 迪拜国际设计周, 2021
- 12) Silent Delivery, 迪拜国际设计周, 2021
- 13) Coral Reef Rescuer, 迪拜国际设计周, 2021
- 14) One Shoe, 国际 iF 设计奖, 2021
- 15) 无声外卖, DIA 中国设计智造大奖佳作奖, 2021

● 专利

- 1) 一种辅助儿童观察植物和学习生物多样性的绘画系统, 发明授权;
- 2) 一种电子信息工程用通信塔驱鸟装置, 发明授权;
- 3) 一种基于人工智能的辅助设计绘图方法及系统, 发明授权;
- 4) 一种新型露水收集装置, 发明授权;
- 5) 一种儿童心理健康成长用趣味互动装置, 发明授权;
- 6) 一种儿童心理健康成长测评仪, 发明授权;
- 7) 一种 UDP 网络协议实现浏览器显示心电图的装置和方法, 发明授权;
- 8) 立体编织模型的制作方法, 发明授权;
- 9) 一种伸缩电冰箱, 发明授权;
- 10) 一种可分享的笔, 发明授权;
- 11) 一种会旋转的 LED 灯, 发明授权;
- 12) 一种模拟喷泉效果的自动感应式喷水浴缸, 发明授权;
- 13) 一种健身器材, 发明授权;
- 14) 交互式游戏装置, 发明授权;
- 15) 一种快捷充气式救生装置, 发明授权;

● 论文 (2023-2021)

2023

1. Observe It, Draw It: Scaffolding Children's Observations of Plant Biodiversity with an Interactive Drawing Tool. ACM Interaction Design and Children (IDC) Conference. 2023 (CCF C)
2. MechCircuit: Augmenting Laser-Cut Objects with Integrated Electronics, Mechanical Structures and Magnets. CHI Conference on Human Factors in Computing Systems. 2023 (CCF A)
3. MathKingdom: Teaching Children Mathematical Language Through Speaking at Home via a Voice-Guided Game. CHI Conference on Human Factors in Computing Systems. 2023 (CCF A)
4. E-Reminder: A mindfulness-based interactive eating reminder device to improve emotional eating. International Conference on Human-Computer Interaction. 2023
5. Silent Delivery: Make Instant Delivery More Accessible for the DHH Delivery Workers through Sensory Substitution. International Conference on Human-Computer Interaction. 2023
6. Towards Personalized Instruction-Co-designing a Teacher-Centered Dashboard for Learning Engagement Analysis in Blended Learning Environments. International Conference on Human-Computer Interaction. 2023
7. StressButton: Using Connectivity of Everyday Objects for Children to Coping Learning Stress. International Conference on Applied Human Factors and Ergonomics. 2023

2022

8. A study of children's learning and play using an underwater robot construction kit. International Journal of Technology and Design Education, 2022: 1-20. (SCI)

9. A Child–AI Collaborative Drawing System to Support Children's Creative Visual Storytelling. CHI Conference on Human Factors in Computing Systems. 2022: 1-15. (CCF A)
10. PneuMesh: Pneumatic-driven Truss-based Shape Changing System. CHI Conference on Human Factors in Computing Systems. 2022: 1-12. (CCF A)
11. CamFi: An AI-driven and Camera-based System for Assisting Users in Finding Lost Objects in Multi-Person Scenarios. CHI Conference on Human Factors in Computing Systems. 2022: 1-7. (CCF A)
12. SignFind: A Synchronized Sign Language and Chinese Character Teaching Game for Chinese Deaf Children Using Gesture Recognition. CHI Conference on Human Factors in Computing. 2022: 1-7. (CCF A)
13. Pababy: An Interactive System for First-time Parents to Learn Neonatal Nursing. CHI Conference on Human Factors in Computing Systems. 2022: 1-7. (CCF A)
14. Menstrual Monster: A Tangible Interactive Co-educational Game Designed for Teenagers. CHI Conference on Human Factors in Computing Systems. 2022: 1-7. (CCF A)
15. MusicCollage: A Music Composition Tool for Children Based on Synesthesia and a Genetic Algorithm. International Conference on Human-Computer Interaction. Springer, Cham, 2022: 205-216. (EI)
16. InterestPainter: A painting support tool to promote children's interest in painting. International Conference on Human-Computer Interaction. Springer, Cham, 2022: 398-410. (EI)
17. Design with Caregivers: Enhancing Social Interaction for Children with Down Syndrome. International Conference on Human-Computer Interaction. Springer, Cham, 2022: 442-452. (EI)

2021

18. ElectroPaper: Design and Fabrication of Paper-Based Electronic Interfaces for the Water Environment. Electronics. 2021; 10(5):604. (SCI)
19. Rope X: Assistance and Guidance on Jumping Rope Frequency, based on Real-time, Heart Rate Feedback During Exercise. In The Adjunct Publication of the 34th Annual ACM Symposium on User Interface Software and Technology (UIST '21). Association for Computing Machinery, New York, NY, USA, 63–65. (CCF B)
20. Papimation: A Symbol System for Children to Animate their Drawing. In: Streitz N., Konomi S. (eds) Distributed, Ambient and Pervasive Interactions. HCII 2021. Lecture Notes in Computer Science, vol 12782. Springer, Cham. 2021. (EI)
21. TangiLetter: An Interactive Vocabulary System for Children to Learn Words About Wild Animals. In: Streitz N., Konomi S. (eds) Distributed, Ambient and Pervasive Interactions. HCII 2021. Lecture Notes in Computer Science, vol 12782. Springer, Cham. 2021. (EI)
22. Technology Probes to Explore How Children Learn about Gender Stereotypes. In: Streitz N., Konomi S. (eds) Distributed, Ambient and Pervasive Interactions. HCII 2021. Lecture Notes in Computer Science, vol 12782. Springer, Cham. 2021. (EI)
23. ModHera: A modular kit for parents to take care babies. In Interaction Design and Children (IDC '21). Association for Computing Machinery, New York, NY, USA, p547–551. 2021. (CCF C)
24. Bubble Beats: A Breathing Exercise Game Based on Music Rhythm for Children. Interaction Design and Children (IDC '21). Association for Computing Machinery, New York, NY, USA, p588–592. 2021. (CCF C)
25. Bio Sketchbook: an AI-assisted Sketching Partner for Children's Biodiversity Observational Learning. Interaction Design and Children (IDC '21). Association for Computing Machinery, New York, NY, USA, p466–470. 2021. (CCF C)
26. StoryDrawer: A Co-Creative Agent Supporting Children's Storytelling through Collaborative Drawing. 2021 CHI Conference on Human Factors in Computing Systems. Association for Computing Machinery, New York, NY, USA, 2021. (CCF A)
27. ColorGuardian: Customize Skin Tattoos for Children with Vitiligo. 2021 CHI Conference on Human Factors in

Computing Systems. Association for Computing Machinery, New York, NY, USA, 2021. (CCF A)

● 标准

1. 《电动平衡车安全要求及测试方法》(GB/T34668-2017) (国标)
2. 《电动平衡车通用技术条件》(GB/T34667-2017) (国标)
3. 《固定通信终端的工业设计和评定规范》(T/CIDADS00001-2021) (团标)
4. 《移动通信终端的工业设计和评定规范》(T/CIDADS00002-2021) (团标)

● 学术兼职

工信部财政部课题专家

国际计算机学会 (ACM) 会员

国际计算机学会 (ACM) SIGCHI 会员

美国产品开发与管理协会 Product Development and Management Association (PDMA) 会员

美国设计管理学会 Design Management Institute (DMI) 会员

中国工业设计协会 (CIDA) 会员

中国人工智能学会智能创意与数字艺术专业委员会成员

● 主办与参与活动

2022.09 2022 年中国优秀工业设计奖评审专家

2022.07 2022 “市长杯”中国 (温州) 工业设计大赛评审专家

2020.11 2020 年中国优秀工业设计奖评审专家

2020.06 东省第三届 “省长杯” 工业设计大赛评审专家

2019.12 第二届世界生态设计大会主办方专家

2019.10 世界 5G 大会应用设计揭榜赛校园分赛评委

2019.10 第三届世界工业设计大会特邀嘉宾

2019.07 国际设计研究与科技论文写作工作坊主办方负责人、导师

2019.04 中国广州国际投资年会特邀主题演讲嘉宾

2018.12 第一届世界生态设计大会主办方专家

2018.11 国际设计学科学术论文研讨会主办方负责人、导师

2018.11 设计教育领军人才师资培训工作坊专家

2018.10 扬州新玩具设计创新创业大赛主办方负责人

2018.11 中国金点工业设计终评评委

2018.04 第二届世界工业设计大会主题演讲嘉宾、主办方专家

2017.11 安徽省第四届工业设计大赛终评评委

2017.11 迪拜国际设计周特邀专家

2017.09 全国工业设计领军人才设计科技工作坊导师

2016.12 第一届世界工业设计大会主办方专家

2016.06 “挑战杯” 全国职业学校创新创业大赛复赛工业设计组评审组长

2016.05 全国设计师大会特邀主题演讲嘉宾

2015.04 美国卡内基梅隆大学人机交互学院特邀学术讲座嘉宾

2012.07 Asian 5 亚洲五大学工作坊 (日本千叶大学) 导师