

ARDA ÇALIŞKAN

arda.caliskan@yahoo.com, Istanbul / Türkiye

<https://www.linkedin.com/in/caliskanarda/>, <https://orcid.org/0000-0002-2306-7406>, <https://www.ardacaliskan.design/>

PROFILE SUMMARY

Lecturer with PhD in Architecture and Design from Bahçeşehir University, specializing in Virtual Reality (VR), immersive learning, and game-based approaches to architectural education. Developed VR projects including VR ConstructED, an educational game for construction pedagogy, My Taste Journey, a VR experience prepared for Kerry Group and Following the Traces of Sedat Hakkı Eldem, a collaborative VR documentary game focused on architectural heritage. Author of 2 peer-reviewed journal articles, 2 book chapters, and 8 international conference papers. Recipient of the Emerging Scholar Award and competitive travel grants from TÜBİTAK and NAWA. Brings 6+ years of teaching experience in design studios and construction courses, mentoring more than 100 undergraduate students annually.

EDUCATION

Ph.D. in Architecture and Design <i>Bahçeşehir University, Istanbul, Türkiye. GPA: 4.00/4.00</i> “Construction Education Through Virtual Reality: A Game-Based Approach for Interior Architecture Students”	2020 - 2026
MSc in Interior Design <i>Bahçeşehir University, Istanbul, Türkiye. GPA: 3.95/4.00</i> “Place-making Practices of Z Generation: Case of Dormitory Rooms	2017 - 2020
B.A. in Interior Architecture and Environmental Design <i>Bahçeşehir University, Istanbul, Türkiye. GPA: 3.29/4.00</i>	2013 - 2017

RESEARCH INTERESTS

Virtual Reality (VR) applications in architectural and design education
Game-based learning and gamification for architectural and design education
Interior architecture pedagogy and spatial learning
Digital tools and immersive environments for enhancing student engagement
Human-computer interaction in educational contexts

ACADEMIC AND PROFESSIONAL EXPERIENCE

Lecturer <i>Faculty of Architecture and Design, Bahçeşehir University, Istanbul, Türkiye</i> Teaching experience includes undergraduate design studio/project courses and construction-related courses in interior architecture.	2026 - Present
Research Assistant <i>Faculty of Architecture and Design, Bahçeşehir University, Istanbul, Türkiye</i> - Supporting undergraduate education in design studios, construction courses, and digital media classes. - Conducting doctoral research on Virtual Reality (VR) and game-based learning in architectural education. - Coordinating departmental VR-based exhibitions and academic events.	2019 - 2026
Interior Architect <i>Bahçeşehir College, Istanbul, Türkiye</i> Worked on interior design projects, focusing on functional and aesthetic solutions for educational spaces.	2018 - 2019
Interior Architect <i>Uğur Schools, Istanbul, Türkiye</i> Contributed to architectural and interior design projects, including the adaptation and renovation of educational facilities.	2017 - 2018

RESEARCH PROJECTS

VR ConstructED (2022 – 2026) Doctoral research project: Development of a VR educational game in <i>Unreal Engine 5</i> for teaching wall construction techniques and materials to interior architecture students.	
Following the Traces of Sedat Hakkı Eldem in Istanbul (2022) - Collaborative VR project exploring architectural heritage through a digital documentary game format. - Contributed to content development, VR environment design, and testing phases.	
BAU Virtual Exhibitions (2020 – 2025) Coordination and development of virtual exhibitions for the Faculty of Architecture and Design at Bahçeşehir University.	

- Created 360° interactive VR tours of student projects across Interior Architecture, Architecture, and Industrial Design programs.

PUBLICATIONS AND PRESENTATIONS

Peer-Reviewed Journal Articles

- Çalışkan, A., & Girginkaya Akdağ, S. (2025). Virtual reality learning environments in architecture and design education: A bibliometric review. *A+Arch Design International Journal of Architecture and Design*, 11(1), 73–91.
- Şahin, P., Çalışkan, A., Hacitahiroğulları, Z. V., Ceylan, S., et al. (2024). A comparative study on the VR experience of students in a digital documentary game. *Journal of Metaverse*, 4(1), 33–42. <https://doi.org/10.57019/jmv.1332459>

Book Chapters

- Çalışkan, A. (2022). Housing preferences for Generation Z students: A case study in Istanbul. In Ü. Gülmez, N. Isıkkaya, & A. Devrim (Eds.), *Scales, thresholds and dilemmas of housing transformations in Istanbul* (pp. 103–126). Peter Lang Publishing. ISBN: 978-363185492-1, 978-363185491-4
- Çalışkan, A., Şahin, P., Hacitahiroğulları, Z. V., Ceylan, S., et al. (2022). Following the traces of Sedat Hakkı Eldem: A case study on the contribution of virtual reality-based documentary games to architectural education. In M. Şaşmaz (Ed.), *Engineering from machine learning to virtual reality* (pp. 123–137). IKSAD Publishing. ISBN: 978-625-6380-94-3

Conference Proceedings & Presentations

- Çalışkan, A., & Girginkaya Akdağ, S. (2025, October 1–3). *Bridging theory and practice: Evaluating a game-based VR approach in construction education*. 19th European Conference on Games Based Learning (ECGBL 2025), Levanger, Norway.
- Çalışkan, A. (2025, June 4). *Level up sustainability: A VR-based gamified approach to material choices in interior architecture education*. Digital Architecture Research Conference (DARe 2025), Faculty of Architecture, Bialystok University of Technology, Poland.
- Aydın, Y. N., & Çalışkan, A. (2024, December 17–18). *The impact of simulation games on urban planning education: An insight from Cities: Skylines 2* [Conference presentation]. 13th Made By Artist International Symposium (FADES 2024), Tbilisi State Academy of Arts, Tbilisi, Georgia.
- Çalışkan, A. (2024, October 3–4). *Construction education through virtual reality: A game-based approach for interior architecture students* [PhD research paper presentation]. 18th European Conference on Games Based Learning (ECGBL 2024), Aarhus School of Architecture, Denmark.
- Çalışkan, A., & Ceylan, S. (2024, May 23–26). *A new way of presenting: Redefining architecture and design exhibition through virtual realms. Architecture into Unknown*. Aarhus School of Architecture, Aarhus, Denmark.
- Çalışkan, A., & Torus, B. (2024, March 11–13). *Smart city or smart home: Examples of movies and TV series*. 18th International Conference on Design Principles & Practices, Universitat Politècnica de València, Spain (Hybrid).
- Çalışkan, A., & Ceylan, S. (2023, March 1–3). *A review on the virtual exhibitions in the fields of architecture and design*. 1st International Conference Digital Architecture Research (DARe), Bialystok University of Technology, Poland. ISBN: 978-83-67185-55-4
- Çalışkan, A., Ceylan, S., Şahin, P., Masalcı, S. Z., Hacitahiroğulları, Z. V., & Çatak, G. (2022, November 11–12). *Virtual reality-based documentary games' contribution to architectural education: A case study*. In Proceedings of the 5th Media Literacy Forum International Social Sciences Congress in the Age of Digital Transformation (pp. 608–612). Istanbul.

TEACHING EXPERIENCE

Lecturer

2026 - Present

Faculty of Architecture and Design, Bahçeşehir University, Istanbul

- **Design Studio II (2nd year, ~70 students annually):** Supervised design projects, coordinated juries.
- **Construction for Interior Architecture I & II (2nd year, ~90 students annually):** Giving lectures and exercises, guided technical assignments, evaluated student work.

Teaching Assistant

2019 - 2026

Faculty of Architecture and Design, Bahçeşehir University, Istanbul

- **Design Studio II (2nd year, ~90 students annually):** Supervised design projects, coordinated juries, integrated VR-based tools into studio work.
- **Construction for Interior Architecture I & II (2nd year, ~100 students annually):** Assisted in lectures and exercises, guided technical assignments, evaluated student work.
- **Detail Studio (3rd year, ~80 students annually):** Supported advanced design projects with focus on construction detailing and materials.
- **Technical Drawing for Interior Architecture:** Conducted drawing workshops and assessed technical proficiency.
- **Digital Media in Interior Architecture (2nd year, ~70 students annually):** Assisted students in applying digital tools and visualization techniques, guided assignments, and supported the integration of new media into design education.
- **Insights on Earthquake Resistant Design, Skopje/Ohrid, North Macedonia — 2024:** Served as an academic instructor in

an international workshop, delivering lectures and guiding student groups on resilient architectural design strategies.

- **Summer School in Barcelona, Spain — 2023:** Contributed as an academic mentor in an intensive international summer school on urban life and architecture, supporting workshop and guiding student design explorations.

Overall: 6+ years of teaching experience across studio and technical courses, mentoring more than 100 undergraduate students each year, and contributing to the integration of immersive technologies into curricula, complemented by participation in international workshops, summer schools, and design competitions.

GRANTS, SCHOLARSHIPS AND AWARDS

TÜBİTAK 2224-A International Conference Participation Support – 2025

NAWA Conference Participation Grant, Polish National Agency for Academic Exchange – 2025

Emerging Scholar Award, *Design Principles & Practices Research Network Conference* – 2024

Second Prize, *The 1st STELSI International Metaverse Architecture Competition* – 2023

NAWA Conference Participation Grant, Polish National Agency for Academic Exchange – 2023

Full Honor Roll Scholarship, Bahçeşehir University – 2013–2017

- Awarded during undergraduate studies at Bahçeşehir University.
- Graduated first in department, leading to a 100% scholarship for both Master's and PhD studies.

TECHNICAL SKILLS

Design & Drafting Software: AutoCAD, SketchUp

Rendering & Visualization: Lumion, Twinmotion, Enscape

Graphic & Presentation Tools: Adobe Photoshop, Adobe Illustrator

Game Engines & VR Tools: Unreal Engine 5 (Blueprint coding), Oculus Quest 2-3, HTC Vive

Productivity & Office Tools: Microsoft Office (Word, Excel, PowerPoint, Teams)

ADDITIONAL SKILLS

Academic Expertise – Over six years of teaching experience in design studios, construction courses, and technical drawing, mentoring students from undergraduate to graduate levels.

Professional Practice – Interior architect experience in private sector and educational institutions, delivering design projects and collaborating with multidisciplinary teams.

International Collaboration – Participated in funded projects, mobility programs (NAWA, TÜBİTAK), and academic exchanges across Europe.

Communication & Teamwork – Presented research at global conferences, collaborated with colleagues across disciplines, and supported students with constructive feedback.

Creativity & Problem-Solving – Applied innovative approaches to architecture education, combining digital tools with pedagogical strategies to enhance learning outcomes.

REFEREES

Assoc. Prof. Dr. Suzan Girginkaya Akdağ (Ph.D. supervisor)

Bahçeşehir University, Department of Interior Architecture and Environmental Design

Email: suzan.girginkayaakdag@bau.edu.tr

Assoc. Prof. Dr. Salih Ceylan

Istanbul Kültür University, Department of Architecture

Email: salihc@gmail.com

Dr. Adam Jakimowicz

Vice-Dean for Development and Cooperation

Faculty of Architecture, Bialystok University of Technology

Email: a.jakimowicz@pb.edu.pl