



# Mahmoud Mabrouk Ibrahim Sayed Ahmed

Researcher | Lecturer | Urban Planner

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🗣️ MahmoudMabroukEGY

## 👤 EMPLOYMENT HISTORY

2025 – Present  
Cairo University,  
Egypt

### Lecturer

Urban Planning Department, Faculty of Urban and Regional Planning (FURP), Cairo University

2022 – 2025  
Zhejiang University,  
Hangzhou, China

### Ph.D. Researcher in Urban Planning

Institute of Urban and Rural Planning Theories and Technologies, Zhejiang University (Shanghai Ranking=27) 📄

- Conducted doctoral research on urban resilience and spatial planning methodologies.
- Engaged in international collaboration on flood-prone city planning.
- Published peer-reviewed articles and presented findings at global conferences.
- Participated in academic workshops as part of the doctoral program.

2017 – 2024  
Cairo University,  
Egypt

### Assistant Lecturer

Urban Planning Department, Faculty of Urban and Regional Planning (FURP), Cairo University

- Assisted in teaching core courses in urban planning.
- Supported senior faculty in delivering lectures and managing studio projects.
- Provided mentoring and technical support to undergraduate students.
- Participated in academic research and departmental development initiatives.

2017 – 2022  
Giza, Egypt

### Urban Planner Engineer

Khatib & Alami (K&A), Egypt

- Worked on large-scale housing, resort, and mixed-use development projects across Saudi Arabia.
- Responsible for master planning, land-use design, and urban layout coordination.
- Prepared planning reports, site analyses, and design presentations.

2015 – 2017  
Sheraton El Matar,  
Egypt

### Urban Planner Engineer

Genesis

- Participated in the planning and design of major educational campuses in Saudi Arabia.
- Developed site master plans, infrastructure layouts, and land-use schemes.
- Collaborated with multidisciplinary teams on planning documentation and proposals.

2014 – 2017  
Cairo University,  
Egypt

### Demonstrator

Urban Planning Department, Faculty of Urban and Regional Planning (FURP), Cairo University

- Conducted tutorial sessions and workshops in urban planning fundamentals.
- Coordinated student assessments and practical training activities.

## 🎓 EDUCATION AND QUALIFICATIONS

2022 – 2025  
Hangzhou, China

### Ph.D. in Urban Planning

Institute of Urban and Rural Planning Theories and Technologies, Zhejiang University  
Thesis Title: "Resilience-Oriented Urban Planning: A Multi-Scale Adaptive Approach to Flood-Resilient Cities."

2020 – 2022  
Hangzhou, China

### Ph.D. diploma

Institute of Urban and Rural Planning Theories and Technologies, Zhejiang University

2017 – 2018	<b>Preliminary Ph.D. Courses</b> Urban Planning Department, Faculty of Urban and Regional Planning (FURP), Cairo University, Egypt.
2015 – 2017 Egypt	<b>M.Sc. in Urban Planning</b> Urban Planning Department, Faculty of Urban and Regional Planning (FURP), Cairo University Thesis Title: "Designing an Urban Sustainable Model for Desert Communities Based on the Aquaculture Industry."
2014 – 2015 Egypt	<b>Preliminary Master Courses</b> Urban Planning Department, Faculty of Urban and Regional Planning (FURP), Cairo University
2008 – 2013 Egypt	<b>B.Sc. in Urban Planning</b> Urban Planning Department, Faculty of Urban and Regional Planning (FURP), Cairo University

## LANGUAGES

Arabic | English

## COMPUTER/ SOFT/ RESEARCH SKILLS

AutoCAD	● ● ● ● ●	Civil 3D	● ● ● ● ●
Iber v3.0	● ● ● ● ●	ArcGIS	● ● ● ● ●
SPSS	● ● ● ● ●	Global Mapper	● ● ● ● ●
Photoshop	● ● ● ● ●	Adobe Illustrator	● ● ● ● ●
Microsoft office	● ● ● ● ●	SketchUp	● ● ● ● ●
R (programming language)	● ● ● ● ●	Soft Skills	● ● ● ● ●
Research Skills	● ● ● ● ●	Project Management, Team Collaboration, Stakeholder Engagement	
Qualitative and Quantitative Methods, Survey Design, Statistical Analysis		Google Earth Engine	● ● ● ● ●

## PUBLICATIONS

2024	1st Author	<b>Spatial Congruency or Discrepancy? Exploring the Spatiotemporal Dynamics of Built-up Expansion Patterns and Flood Risk.</b> <b>Mahmoud Mabrouk</b> , Haoying H., Karim I. A., Mahran Gamal N. M., Salma Antar A. A., Sarah N., Guoqiang S., Chao F., Ahmed Y., Hisham M. H. Sci. of Total Environment (Q1; IF: 8.0), Elsevier <a href="https://doi.org/10.1016/j.scitotenv.2024.170019">https://doi.org/10.1016/j.scitotenv.2024.170019</a> 
2024	1st Author	<b>Revisiting Urban Resilience: A Systematic Review of Multiple-Scale Urban Form Indicators in Flood Resilience Assessment.”</b>  <b>Mahmoud Mabrouk</b> , Haoying H., Mahran Gamal N. M., Karim I. A., Ahmed Y. Sustainability (Q2; IF: 3.3), MDPI <a href="https://doi.org/10.3390/su16125076">https://doi.org/10.3390/su16125076</a> 
2023	1st Author	<b>Assessing the Effectiveness of Nature-Based Solutions-Strengthened Urban Planning Mechanisms in Forming Flood-Resilient Cities</b>  <b>Mahmoud Mabrouk</b> , Haoying H., Chao F., Karim I. A., Guoqiang S., Mohamed S., Sameh A. K., Tetsuya S. Journal of Environmental Management (Q1; IF: 8.4), Elsevier <a href="https://doi.org/https://doi.org/10.1016/j.jenvman.2023.118260">https://doi.org/https://doi.org/10.1016/j.jenvman.2023.118260</a> 
2023	1st Author/ Corresponding	<b>Urban Resilience Assessment: A Multicriteria Approach for Identifying Urban Flood-Exposed Risky Districts using Multiple-Criteria Decision-Making Tools (MCDM)</b>  <b>Mahmoud Mabrouk</b> , Haoying H. International Journal of Disaster Risk Reduction (Q1; IF: 4.5), Elsevier <a href="https://doi.org/https://doi.org/10.1016/j.ijdr.2023.103684">https://doi.org/https://doi.org/10.1016/j.ijdr.2023.103684</a> 

- 2025  
1st Author/  
Corresponding **Spatial Justice and Climate Vulnerability: Evaluating the Relationship Between Urban Expansion Patterns and Flood Risk**   
Mahmoud Mabrouk  
Societal Impacts (Short Communication), Elsevier  
<https://doi.org/10.1016/j.socimp.2025.100147> 
- 2025  
4th Author **Simulating Optimal Flood Evacuation Using Heuristic Algorithms and Path-Choice Behaviors**   
Housseyn C., Guoqiang S., Haoying H., Mahmoud Mabrouk, Brahim N.  
Simulation Modelling Practice and Theory (Q1; IF: 4.6), Elsevier  
<https://doi.org/10.1016/j.simpat.2025.103167> 
- 2025  
6th Author **Collision Dynamics of Cassava Seed Stems: Analyzing Recovery Coefficients and Influential Factors for Precision Agriculture**   
Xiangwei M., Rui C., Lintao C., Ying L., Elsayed M. A., Mahmoud Mabrouk, Huanyu J., Peng Z.  
Agronomy (Q3; IF: 3.2), MDPI  
<https://doi.org/10.3390/agronomy15040805> 
- 2024  
2nd Author **Mapping COVID-19's Potential Infection Risk Based on Land Use Characteristics: A Case Study of Commercial Activities in Two Egyptian Cities**   
Karim I. A., Mahmoud Mabrouk, Haoying H., Mohamed S., Sameh A. K., Tetsuya S.  
Heliyon (Q1; IF: 3.6), Elsevier  
<https://doi.org/https://doi.org/10.1016/j.heliyon.2024.e24702> 
- 2024  
2nd Author/  
Corresponding **Urban Competitiveness Assessment using the Integration of the Global Power City Index and Multicriteria Decision-Making Methods**   
Karim I. A., Mahmoud Mabrouk, Ahmed M.  
Journal of Urban Planning and Development (Q3; IF: 3.2), ASCE LIBRARY  
<https://doi.org/10.1061/JUPDDM.UPENG-4789> 
- 2024  
3rd Author **Social Infrastructure During the COVID-19 Pandemic: Evaluating the Impact of Outdoor Recreation on Pandemic Dynamics in Europe**   
Mahran Gamal N. M., Haoying H., Mahmoud Mabrouk, Salma Antar A. A.  
Sustainability (Q1; IF: 3.6), MDPI  
<https://doi.org/10.3390/su162310343> 
- 2024  
5th Author **Evaluating the Impact of Moisture Content and Loading Orientation on the Geometrical Characteristics and Mechanical Behavior of Cassava Tubers**   
Lintao C., Kaiwen L., Xiangwei M., Zhaoxiang L., Huanyu J., Mahmoud Mabrouk, Jinming P., Elsayed M. A.  
Agronomy (Q1; IF: 3.4), MDPI  
<https://doi.org/10.3390/agronomy14102254> 
- 2024  
4th Author **Nutritional Quality Assessment of Miscellaneous Cassava Tubers Using Principal Component Analysis and Cluster Analysis**   
Lintao C., Rui C., Elsayed M. A., Mahmoud Mabrouk, Huanyu J., Xiangwei M., Xu M.  
Foods (Q1; IF: 5.2), MDPI  
<https://doi.org/10.3390/foods13121861> 
- 2023  
1st Author/  
Corresponding **Assessing the Influence of Commercial Activity Characteristics Spatially on Human Behavior Post-COVID-19 Pandemic**   
Mahmoud Mabrouk  
Research Square (Preprint)  
<https://10.21203/rs.3.rs-3137918/v1> 
- 2025  
7th Author **Integrating DEM Simulations in the Design and Experimental Analysis of a Perturbation-Type Grooved Drum Seed-Metering Device for Hybrid Rice Seedlings**   
Lintao C., Minna W., Elsayed M. A., Jun W., Xiangwei M., Huanyu J., Mahmoud Mabrouk, Xu M., Jinming P.  
Smart Agricultural Technology (Q1; IF: 5.7), Elsevier  
<https://doi.org/10.1016/j.atech.2025.101410> 
- 2023  
2nd Author/  
Corresponding **Towards Sustainable Cities: A Review of Zero Energy Building Techniques and Global Activities in Residential Buildings**   
Gamal A. M., Mahmoud Mabrouk, Guoqing H., Karim I. A.  
Energies (Q3; IF: 3.2), MDPI  
<https://doi.org/10.3390/en16093775> 

- 2023 **1st Author/ Corresponding** **Assessing the Effectiveness of Urban Patterns in Shaping Flood-Resilient Cities**   
**Mahmoud Mabrouk**, Haoying H.  
*New Ideas of New Century*, pages 385–393. Pacific National University, Russia.  
 (Conference paper).  
<https://tinyurl.com/mtwwkj45> 
- 2017 **1st Author/ Corresponding** **Designing an Urban Sustainable Model for Desert Communities Based on Aquaculture Industry**   
**Mahmoud Mabrouk**  
*Journal of Urban Research (JUR)*, FURP  
<https://jur.journals.ekb.eg> 
- 1st Author/ Corresponding** **Nature-based Solution-based Intervention Measures for Enhancing Flood-Resilient Cities**  
**Mahmoud Mabrouk**  
*Journal of Coastal Conservation, Springer Nature*  
 (IF=2.3, Q1) [Under Review].
- 5th Author** **Causal Complexity of Risk Perception and Mitigation Actions on Urban Flood Resilience: Evidence from a Semi-Arid Algerian City**  
 Housseyn C., Guoqiang S., Haoying H., Brahim N., **Mahmoud Mabrouk**  
*Sustainable Cities and Society, Elsevier*  
 (IF = 12, Q1) [Ist revision, under review].
- 1st Author/ Corresponding** **Societal Impacts of Behavior-Aware Flood Evacuation Modeling for Enhancing Flood-Resilient Cities**  
**Mahmoud Mabrouk**  
*Societal Impacts, Elsevier*  
 [Ist revision, under review].
- 1st Author** **Nature-Based Solutions for Climate-Resilient Cities: A Systematic Review of Effectiveness, Trade-Offs, and Policy Pathways**  
**Mahmoud Mabrouk**  
 Ready for submission
- 1st Author** **Toward Climate-Resilient Cities: Development of An Integrated Neighborhood-Scale Urban Vulnerability Index using Adaptive Neuro-Fuzzy Inference System and Multi-Criteria Decision-Making Techniques**  
**Mahmoud Mabrouk**  
 Ready for submission

## PROJECTS (EXPERIENCE IN URBAN PLANNING PROJECTS)

### **Khatib & Alami (K&A)—Housing Development Projects (2017–2022)**

- 2017 – 2022 **Wahat Al Ghoroub, Madina, KSA**
- Participated in the comprehensive detailed design of a 4-million-square-meter urban development project comprising residential communities, resorts, and supporting facilities.
  - Developed the master plan, including zoning and circulation networks.
  - Designed neighborhood layouts, open space networks, and street typologies.
  - Collaborated with infrastructure and architectural teams to ensure integration.
- 2019 – 2021 **Al-Namas Housing Community, KSA**
- Provided design input on a regional housing initiative.
  - Integrated topographic and environmental constraints into site design.
  - Supported coordination with landscape and infrastructure teams.
- 2019 – 2021 **Yabs Althnan Development, KSA**
- Assisted in the layout design of residential plots and circulation systems.
  - Created schematic design visuals for client presentations.
- 2018 – 2021 **Yanbu Residential Project, KSA**
- Contributed to the site layout and open space framework for a major housing scheme.
  - Supported the preparation of planning reports and design deliverables.
- 2018 – 2021 **Abohur Project, KSA**
- Contributed to the site layout and open space framework for a major housing scheme.
  - Supported the preparation of planning reports and design deliverables.

- 2017 – 2021 **Abyar Ali, Madina, KSA**
- Engaged in the planning and design of a 4-million-square-meter residential resort complex.
  - Contributed to land use distribution and detailed parcelization.
  - Designed public realm elements and community services integration.
- 2018 – 2020 **Al-Taif Residential Development, KSA**
- Led the detailed design of a 1.23-million-square-meter residential area.
  - Developed street hierarchy, housing clusters, and green buffer zones.
  - Participated in 3D modeling and visual presentations for client approvals.
- 2017 – 2019 **Khams Mathuat, KSA**
- Worked on the detailed design for a medium-scale residential development.
  - Focused on layout optimization, access points, and housing typologies.
- Genesis Consulting—Educational Facility Design (2015–2018)**
- 2015 – 2018 **King Khalid University, KSA**
- Participated in the detailed planning and design of multiple educational buildings.
  - Developed site master plans including academic zones, dormitories, and services.
  - Focused on spatial connectivity, pedestrian movement, and service zoning.
- 2017 – 2018 **New Bisha University, KSA**
- Contributed to the planning and design of a new university campus.
  - Assisted in academic facility planning, green space allocation, and service core.
- 2017 – 2018 **Existing Bisha University, KSA**
- Worked on the redevelopment and expansion of the existing campus.
  - Evaluated existing conditions and integrated new buildings into the site.
- Sabour Consulting—Residential and Mixed-Use Projects (2016–2019)**
- 2016 – 2017 **Military Intelligence Residential Compound—New Capital, Egypt**
- Developed master plans and conceptual visualizations for a secure residential compound.
  - Integrated administrative and service buildings within the compound layout.
  - Participated in client presentations and stakeholder coordination.
- 2016 **Marina Island Tourist Village—Egypt**
- Designed conceptual plans for a coastal tourism village.
  - Focused on water-edge development, resort zoning, and hospitality layouts.
  - Created initial 3D visuals for marketing and proposal purposes.
- 2018 **Housing Project—Heyopolis City, New Cairo**
- Participated in the planning and design of residential neighborhoods.
  - Focused on design presentation and urban form coherence.
- 2016 – 2017 **9,000 Villas Housing Project—Riyadh, KSA**
- Worked under the supervision of Dr. Hisham Hafez and Talaat Moustafa Group.
  - Contributed to site planning, design development, and visual presentation materials.
  - Designed hierarchical road networks and community clusters.
- Freelance Urban Planning and Design Projects (2015–2021)**
- 2019 – 2021 **Galala University—Egypt**
- Designed spatial layouts for educational facilities and integrated services.
  - Focused on academic zoning, student circulation, and open space systems.
- 2017 – 2018 **Kalba Housing Project—UAE**
- Developed detailed housing designs tailored to local context and environment.
  - Delivered layout plans, housing prototypes, and infrastructure integration.
- 2018 – 2019 **3,000 Apartments Housing Project—Riyadh Sikon, New Cairo**
- Supported layout development and housing cluster design.
  - Worked on visual materials and urban design presentations.
- 2019 **Three Housing Projects in Green Belt—6th October City, Egypt**
- Planned 37 residential villas.
  - Delivered design reports and visual presentations.
- 2017 **Strategic Plan—Al-Bour City, Egypt**
- Participated in both the first and second stages of strategic city planning.
  - Contributed to urban growth scenarios, service area coverage, and spatial policy development.

- 2017 **Residential Area Design—Al-Amarat, Sharjah, UAE**
- Developed a master plan adapted to mountainous terrain.
  - Integrated natural topography with residential layouts.
- 2017 **Qatah Shamsan Planning Study—Aseer, KSA**
- Conducted baseline studies and developed general plans for a new urban area.
  - Collaborated with the Phase Consulting Office.
- 2017 **Historic Area Development—Al-Alian & Al-Thuratiya, Egypt**
- Participated in cultural and historic revitalization efforts.
  - Focused on public space redesign, preservation strategies, and adaptive reuse.
- 2016 **Al-Warraaq Island Development—Giza, Egypt**
- Contributed to sustainable island planning and design integration.
  - Focused on housing, mobility, and landscape components.
- 2017 **Al-Namas Central Region Development—KSA**
- Developed regional urban strategies and detailed plans for public realm enhancements.
- 2017 **Al-Waili Area Detailed Plan—Cairo, Egypt**
- Prepared zoning regulations and detailed land use plans for Greater Cairo's urban authority.

## CONFERENCES AND WORKSHOPS

- 2024  
Hangzhou, China **Presented at International Student Academic Exhibition, Zhejiang University**
- 2023  
Russia **Presented at the New Ideas of the New Century Conference, Pacific National University**
- 2023  
Hangzhou, China **Presented at International Student Academic Exhibition, Zhejiang University**
- 2021  
Cairo, Egypt **Presented at the After COVID-19 Era Conference, Housing and Building National Research Center**
- 2018  
El Gouna, Egypt **Attended Climate Justice workshop, in collaboration with TU Berlin University**
- 2025  
Cairo University, Egypt **The Second Innovation Forum: "Academic Innovation and Labor Market Challenges: Towards a Strategic Partnership"**

## AWARDS

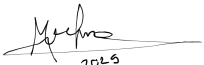
- 2025 **Award of International Student Honorary Title of Excellence**  
*Zhejiang University, Hangzhou, China*
- 2024 **Award of International Student Honorary Title of Excellence**  
*Zhejiang University, Hangzhou, China*
- 2024 **The 4th Award of Academic Poster at the Second International Student Academic Exhibition**  
*Zhejiang University, Hangzhou, China*
- 2023 **Award of Top 10 Academic Posters**  
*Zhejiang University, Hangzhou, China*
- 2023 **The Grand Prix of the Best Presentation in the New Ideas of New Century Conference**  
*Pacific National University, Russia*
- 2020 **Award of the Chinese-Egyptian Government's Joint Executive Programme**  
*Chinese-Egyptian Government*

## DECLARATION

I hereby declare that all the information provided in this resume is true, accurate, and complete to the best of my knowledge. I understand that any misrepresentation or omission of facts may result in disqualification or termination of employment/academic standing.

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**Mahmoud Mabrouk**  
Egypt, 06/09/2025



2025