HILA SABOUNI

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EDUCATION

PhD Student in Human-Computer Interaction (HCI) │ Iowa State University (ISU), Ames, IA *2023–2026 (Expected)*

Master of Science in Human-Computer Interaction (HCI) │ ISU *2022–2023*

Master of Architecture │ ISU *2020–2022*

KEY SKILLS

- **Research Method:** Surveys, Experimental Design, Interviews, Focus Groups, Literature Review
- **Analysis Method:** Statistical Analysis (Regression, Correlation, T-test, ANOVA), Thematic Analysis, Coding, Persona Creation, Content Analysis
- **Tool Kit:** SPSS, Qualtrics, Miro, Blender, Rhinoceros 3D, Unity, Autodesk Revit, Autodesk AutoCAD, Adobe Creative Cloud Suite
- **Others:** Visual thinking, Mind mapping, Idea generation, Concept diagramming, Project Planning and Time Management, Cross-functional Teamwork, Presenting Research Findings into narratives, Model Making, Sketching
- **Languages:** Persian, English, Turkish

PUBLICATION

- *Apple's Knowledge Navigator: Why Doesn't that Conversational Agent Exist Yet?* *2024*
  CHI
- *The Correlations of Scene Complexity, Workload, Presence, and Cybersickness in a Task-Based VR Game* *2024*
  HCI International
- *Using Agent-Based Modeling to Calculate an Ease Score: Evacuation with Acceptable Simplicity in Emergencies* *2024*
  Annual Modeling and Simulation Conference (ANNSIM)
- *Human Perception of Floor Plan Evaluability: How Easy is it to Evacuate?* *2024*
  Proceeding of the Human Factors and Ergonomics Society (HFES) Annual Meeting
- *Shanashir: A Novel, Efficient Mashrabiya Re-design* *2021*
  Symposium on Simulation for Architecture + Urban Design (SimAUD)

PROFESSIONAL EXPERIENCE

Researcher & Designer | Designer-Engineer Communication Flow and Teamwork | *ISU* *May 2024-Present*

- Researching communication dynamics in designer-engineer project-based collaboration for PhD project
- Evaluating communication theories and interpersonal communication dynamics
- Conducting pilot tests to assess collaboration effectiveness
- Collecting, coding, and analyzing pilot test data
- Collaborating with HCI, computer science, and communication studies advisors to refine analytical approaches
- Developing experimental designs tailored for the target population

Researcher & Designer | NSF-Funded Cybersecurity Research | *ISU* *Aug 2023–May 2025*

- Exploring new pathways into cybersecurity careers for rural English learners through XR-enabled educational tools
- Conducting interviews and focus groups with students to understand user needs, behaviors, and pain points
- Collaborating with interdisciplinary experts in cybersecurity, cybersickness, UX design, and 3D modeling
- Modeling and implementing game elements and conceptualizing the game atmosphere in Unity
- Contributing to the game's narrative development to create an immersive, inclusive experience for learners

Research & 3D Modeling Mentor | NSF REU (Research Experience for Undergrads) | *ISU* *May 2024–Jul 2024*

- Instructed Blender to nine undergrads from diverse backgrounds across the USA accepted into SPRITE-EIT 2024
- Explored remote, high-earning career paths for rural students
- Mentored three undergrads in creating a 3D mini-game on electric circuits with practical, cross-field applications
- Designed surveys; Led focus groups; Conducted three site visits; Performed qualitative analysis to uncover user needs and behavioral patterns

University Instructor | Architecture Studio Course | *ISU* *Aug 2022–May 2024*

- Provided course materials and lectured groups of second-year students (19/semester)
- Directed desk crits and discussion sessions

- Provided and graded assignments
- Organized and moderated three major review sessions and invited reviewers from various backgrounds and professions; Collaborated on midterm and final critiques for advanced architecture students

Researcher & Designer | Master Thesis on Sensory Cues in Virtual Reality | *ISU*   *Aug 2022–Dec 2023*
- Designed and executed a mixed-method user experience study to explore sensory cues in VR environments
- Developed 3D task environment in Rhino and implemented interactive VR conditions in Unity
- Deployed in-depth survey questions in Qualtrics
- Recruited 71 participants; Setup a training session and led the full study
- Analyzed quantitative results using ANOVA in SPSS and coded qualitative themes in Taguette
- Translated research findings into strategic narratives, clear understanding, and opportunities they present

Research & 3D Modeling Mentor | NSF REU (Research Experience for Undergrads) | *ISU*   *May 2023–Jul 2023*
- Taught Blender to nine undergraduates from diverse backgrounds across the USA for SPRITE-EIT 2023
- Mentored three undergrads in creating a 3D game to inspire first-gen students to pursue higher education
- Designed survey and focus group questions; Tested a text-based prototype among local 8 to 12-year-old students

Architect Intern | Klingner & Associates, PC | *Pella, IA*   *Jan 2022–Aug 2022*
- Engaged in all phases of design and construction process of 4 projects (industrial)
- Produced with technical drawings, 3D modeling, and documentation
- Collaborated in client meetings, actively listening to and documenting their requirements and desire

Founder, Owner, and Designer | Risen Design | *Iran*   *May 2016–Nov 2018*
- Managed end-to-end design and construction of nine industrial and residential projects (industrial-residential)
- Delivered projects with 20–30% fewer revisions and achieved cost savings of up to 10% below budget
- Developed culturally and generationally inclusive designs to meet diverse client needs
- Awarded the City Diploma of Customer Rights Protection for excellence in client satisfaction and service quality

LEADERSHIP & AWARDS

HCI Student Organization, *President*   *2024–2025*
HCI Student Organization, *Vice President*   *2023–2024*
Iowa Women in Architecture (IAWIA), *Mentor and Membership Chair*   *2020–2021*

Honorable Mention – ACM CHI Conference   *2024*
Customer Right Protection Award – Risen Design   *2018*