

Nina Sakhnini

sakhnini.nina@gmail.com

www.ninasakhnini.dev

RESEARCH

Human-computer interaction.

INTEREST

EDUCATION

Ph.D., Computer Science Major GPA: 3.75 / 4.00 2027

Computer Science Department, College of Engineering

University of Illinois at Chicago, Chicago, Illinois, USA

Research: Designing technologies for Older Adults

Advisor: Debaleena Chattopadhyay

M.S., Computer Science Major GPA: 3.57 / 4.00 2019

Computer Science Department, College of Engineering

University of Illinois at Chicago, Chicago, Illinois, USA

Master's Thesis: Towards Self-Tracking Personal Pollution Exposure using Wearables

Advisor: Debaleena Chattopadhyay

B.S., Computer Engineering, GPA: 80.5% 2016

Department of Computer Engineering, College of Computer and Information Technology

Jordan University of Science & Technology, Irbid, Jordan

Senior Project: HCI Application for disabled people

Advisor: Muhannad Quwaider

EMPLOYMENT

UX/UI Engineer January, 2022 - December, 2024

Caterpillar, IL , USA

Designing UI components and interactions for engineering software

Teaching Assistant

Fall, 2020, Spring & Fall, 2021

Department of Computer Science, College of Engineering, University of Illinois at Chicago, Chicago, IL , USA

CS 362: Computer Design

Undergraduate-level course

Course Instructor

Summer, 2021

Department of Computer Science, College of Engineering, University of Illinois at Chicago, Chicago, IL , USA

CS 362: Computer Design

Undergraduate-level course

Online Course Builder Teaching Assistant

Summer & Fall, 2020

Department of Computer Science, College of Engineering, University of Illinois at Chicago, Remote

Assisting in the development and administration of multiple online courses

Teaching Assistant Spring, 2020
Department of Computer Science, College of Engineering, University of Illinois at Chicago, Chicago, IL , USA
CS 141: Programming Design II
Freshman undergraduate-level course

Research Assistant Fall, 2019
Department of Computer Science, College of Engineering, University of Illinois at Chicago, Chicago, IL , USA

Teaching Assistant Spring, 2019
Department of Computer Science, College of Engineering, University of Illinois at Chicago, Chicago, IL , USA
CS 422: User Interface Design and Programming
Senior undergraduate-level course

Teaching Assistant Fall, 2017
Department of Computer Science, College of Engineering, University of Illinois at Chicago, Chicago, IL , USA
CS 522: Human-Computer Interaction
Graduate-level course

Research Intern Summer, 2015
Texas Tech University 2015 NSF Research Experiences for Undergraduates Site Program
College of Engineering, Texas Tech University, Lubbock,TX , USA

RESEARCH

HONORS AND AWARDS

Honors and Fellowships—
Arab American Association of Engineers and Architects Scholarship. 2022
Grace Hopper Celebration GHC 20 Scholarship. 2020
UbiComp 2018 Best Poster Honorable Mention. 2018
Jordan University of Science and Technology CIT College Honor List Fall 2014
Jordan University of Science and Technology CIT College Honor List Spring 2013
Jordan Phosphate Mining Company Scholarship for Outstanding Students, 11,000\$ 2011

Travel Awards—
ACM scholarship, CRA-W Graduate Cohort Workshop, Chicago, IL, USA. 2019
UbiComp/ISWC 2018 Student Travel Grant, UbiComp, Singapore, Singapore. \$600. 2018
ACM scholarship, CRA-W Graduate Cohort Workshop, Washington, DC, USA. \$1000. 2017
Student Travel Grant, Texas Tech University 2015 NSF Research Experiences for Undergraduates Site Program, Lubbock, TX, USA. \$600. 2015

Sakhnini, N., Sharifi, H., & Chattopadhyay, D. (2024). How Proficiency and Feelings impact the Preference and Perception of Mobile Technology Support in Older Adults. In Proceedings of the 26th *International ACM SIGACCESS Conference on Computers and Accessibility* (pp. 1-5).

Sakhnini, N., & Chattopadhyay, D. (2022). A Review of Smartphone Fact-Checking Apps and their (Non) Use Among Older Adults. In Adjunct Publication of the 24th International Conference on Human-Computer Interaction with Mobile Devices and Services (*MobileHCI 22* Adjunct). DOI: 10.1145/3528575.3551448

Sakhnini, N., Yu, J. E., Jones, R. M., & Chattopadhyay, D. (2020). Personal Air Pollution Monitoring Technologies: User Practices and Preferences. In *International Conference on Human-Computer Interaction*. Springer, Cham.

Sakhnini, N., & Chattopadhyay, D. (2019). myCityMeter: Self-Tracking Personal Pollution Exposure using Wearables. Presented at the CRA-W Grad Cohort Workshop.

Sakhnini, N., Yu, J., and Chattopadhyay, D. (2018). myCityMeter: Helping Older Adults Manage the Environmental Risk Factors for Cognitive Impairment. *UbiComp* Adjunct. DOI: 10.1145/3267305.3267605
(2018 UbiComp Best Poster Honorable Mention top 3 out of nearly 200 posters)

Sakhnini, N. (2018). myCityMeter Wearable: Measuring the Environmental Risk Factors for Cognitive Impairment in Older Adults. Poster presented at UbiComp 2018 Broadening Participation Workshop.

myCityMeter: Helping Older Adults Manage the Environmental Risk Factors for Cognitive Impairment

Talk at the 2018 Chicago Biomedical Informatics Jam, Chicago, IL. September 2018

Sakhnini, N., & Chattopadhyay, D. (2018). Walking the talk: Generating memory cues to help people with dementia in everyday conversations. Poster presented at the Role/Play: Collaborative Creativity and Creative Collaborations Student Fellows Symposium. National Academy of Sciences, Washington, D. C., USA

Sakhnini, N., & Quwaider M. (2016). Conversation Technology via Low-cost Voice-to-Text over IP: VToIP. Poster presented at the 8th Annual Undergraduate Research Conference on Applied Computing. Zayed University, Dubai, UAE

Sakhnini, N., Inukollu, V. N., and Urban, J. E. (2016). Automatic parallel programming using the descartes specification language. In 2016 7th International Conference on Information and Communication Systems (ICICS), (pp. 298-303). IEEE. DOI: 10.1109/IACS.2016.7476068

Inukollu, V. N., Kang, T., and **Sakhnini, N.** (2015). Design constraints and challenges behind fault tolerance systems in a mobile application framework. In 2015 10th International Design & Test Symposium (IDT), (pp. 159-160). IEEE. DOI: 10.1109/IDT.2015.7396760

SKILLS

Research Methods—

QUALITATIVE: Contextual inquiry, persona creation, scenario building, interviews, usability testing (heuristic inspection, cognitive walk-through, user testing), survey design, sketching, storytelling

QUANTITATIVE: Designing controlled experiments, Parametric & non-parametric statistics

Programming—

Python, Jupyter, Pandas, Javascript, D3.js, THREE.js, Node.js, Express.js, C#, C++, C, Java, R, SQL, Matlab

Data Science and Visualization—

Data abstraction, Data modeling, Visualization design, Data visualization

Software—

Requirement analysis, Testing, Evaluation, Documentation

Tools and Techniques—

Interaction design and implementation, Observable, Unity3D and Unity3D for VR and AR, Android, AR for Android, Visual Studio, Autodesk (Inventor, EagleCAD), Blender

Hardware—

Raspberry Pi, Arduino, Intel Galileo, Onion Omega, Robotics, Hardware Design, HDL/Verilog, Circuit fabrication, 3D printing

Teaching—

Online instruction, Course design, LMS tools management (Blackboard, Gradescope, Piazza)

SERVICE

PEER-REVIEW

Conferences:

CHI 2025: ACM Conference on Human Factors in Computing Systems

MOBILEHCI 2023: International Conference on Human-Computer Interaction with Mobile Devices and Services

CHI 2019 LATE BREAKING WORK: ACM Conference on Human Factors in Computing Systems

CSCW 2018 (SECOND CYCLE): ACM Conference on Computer-Supported Cooperative Work and Social Computing (Student Reviewer)

VOLUNTEERING

ACM Richard Tapia Celebration of Diversity in Computing 2024 Scholarship Reviewer March 2024
Role: Reviewed scholarship applications

Co-Managing Director of the Girls in Tech - Jordan Chapter

June 2022

Role: Overseeing chapter activities and directing the chapter board

ACM Richard Tapia Celebration of Diversity in Computing 2022 Scholarship Reviewer May 2022
Role: Reviewed scholarship applications

ACM Richard Tapia Celebration of Diversity in Computing 2021 Scholarship Reviewer June 2021
Role: Reviewed scholarship applications

Representative of CS department at the UIC Graduate Student Council (UIC GSC) AY 2020/2021
Role: Representing CS graduate students in GSC General Meetings. Bringing up any issues and discussions coming from the body of CS graduate students. Making sure that CS graduate students are informed and on top of all relevant UIC events, services and opportunities.

ACM Richard Tapia Celebration of Diversity in Computing 2020 Scholarship Reviewer May 2020
Role: Reviewed scholarship applications

Grace Hopper Celebration (GHC) 19 Women in Technology Untapped Pathways Grant Committee Member May 2019
Role: Reviewed grant applications

Jordanian Alumni of North America (JANA) Administration committee member January 2019
Roles: Academic advising for Jordanian students who want to study in USA. Organization's event planning and management. Outreach

Art Design Chicago's UIC EVL CAVE2 Demonstration with Dan Sandin and Robert Kooima Volunteer November 2018
Role: Escorted visitors to CAVE2. Helped with technical issues during the demo. Introduced visitors to UIC and the Computer Science department. Answered questions about the technologies used in the demo

UbiComp/ISWC 2018 Conference Student Volunteer October 2018
Role: Helped in setting up the conference and preparing the presentation rooms. Guided people to rooms. Helped the speakers and attendees with technical issues

UIC Computer Science Open-House Volunteer August 2017
Role: Introduced visitors and prospective students to the Computer Science program at UIC. Assisted in showing project demonstrations to people

IEEEExtreme 24-hour Programming Contest Organizing Volunteer October 2014
Role: Helped with setting up rooms for participants. Helped participants with technical issues and helped in maintaining their comfort throughout the contest