

KARIM ZAHED

College Station, TX • +1-(214)-606-9983 • Karim.Zahed@gmail.com
Linkedin.com/in/KarimZahed/ • Acelab.tamu.edu/Karim-Zahed/

SUMMARY OF QUALIFICATIONS

- User Experience Research: 3 years of leading qualitative and quantitative methods to elicit user design requirements and perform usability studies
- Data Science: 4 years of programming and statistical analysis, identifying trends, visualizing data and creating actionable conclusions
- Project Management: 5 years leading multidisciplinary teams to design and implement projects

EDUCATION

Ph.D. in Industrial and Systems Engineering, Texas A&M University - College Station, TX May 2021

- **Area:** Human Factors Engineering in Healthcare- **GPA:** 3.9/4.0 - **Advisor:** Dr. Farzan Sasangohar

M.E. in Industrial and Systems Engineering, Texas A&M University - College Station, TX May 2017

- **GPA:** 3.83/4.00
- Worked as a Teaching Assistant for the Lean Engineering and Production & Inventory control graduate classes
- Taught conversational Arabic to International Affairs students at the Bush School of Government and Public Service

B.E. in Electrical and Computer Engineering, American University of Beirut - Beirut, Lebanon May 2013

- **GPA:** 3.84/4.00
- Worked as a tutor for mathematics and programming courses, and as a student worker in the IT department.
- Worked as an undergraduate student researcher on a PV cell energy efficiency optimization project

WORK EXPERIENCE

Graduate Assistant Lecturer, Texas A&M University, *College Station, TX* 01/2020 – Present

- Proven communication and management experience by teaching 3 semesters of “Engineering Economic Analysis”, confirming all students can justify economic worth of a project, and inspiring them in their career choices

Graduate Assistant Researcher, Texas A&M University, *College Station, TX* 05/2017 – Present

- Product Management skills proven by coordinating work among interdisciplinary teams of researchers, developers, and designers to design and test smartphone apps to improve user health (Ex: HyperCoach for Hypertension, Tremor-App for Diabetes, Biofeedback for PTSD)
- Sharpened user research skills by investigating how to persuade people to adopt healthy behaviors and engage with technology through various test beds such as PTSD, Diabetes, Hypertension, and Drowsy Driving
- Worked as a PATHS-UP fellow for an NSF funded program to analyze data from underserved communities to improve the pervasiveness of Tele-Health to the support management of chronic conditions
- Mentored undergraduate students on the process of user research and building a professional background

Industrial Engineering Intern, Future Pipe Industries Inc., *Houston, TX* 05/2016 – 08/2016

- Learned how to utilize MRP and ERP software for scheduling and production planning
- Proposed a process improvement project that would increase daily pipe production by 17%
- Reallocated the layout plan in a more continuous flow projected to increase annual capacity by 5%

Project Engineer, Bayanat Airport Engineering and Supplies, *Abu Dhabi, UAE*

11/2013 - 08/2015

- Led multifunctional teams to design, manage, and install Airfield Ground Lighting systems
- Built excellent relationship skills by communicating with various stakeholders about project progress

R&D Intern, European Broadcasting Union, *Geneva, Switzerland*

07/2013 - 08/2013

- Performed simulations on MATLAB to assess interference from mobile phones on the reception of digital television

Trainee, MPR Associates Inc., *Alexandria, VA*

08/2012 - 09/2012

- Designed parts in the workshop, performed observations on ongoing testing, and built experiment fixtures

SELECTED PUBLICATIONS

- **Zahed, K.**, Sasangohar, F., Mehta, R., Erraguntla, M., Qaraqe, K. (2020). Diabetes Management Experience and the State of Hypoglycemia: National Data Sample from an Online Survey, *JMIR Diabetes*. 5(2):e17890. DOI: 10.2196/17890
- **Zahed, K.**, Smith, A., Sasangohar, F., McDonald, A.D. (2020). Investigating The Effect Of Education And Drowsiness Detection On Nurses' Beliefs And Attitudes Towards Drowsy Driving. Accepted for publication in *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*.
- Hegde, S., **Zahed, K.**, Son, C., Markert, C., Sasangohar, F. (2020). Facilitating the Practice of Biofeedback Via Mobile Applications and Wearable Devices for Self-Management of Mental Health. Accepted for publication in *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*.
- **Zahed, K.**, Rao, A.H., & Sasangohar, F. (2019). Behavior Change and Persuasion in Mobile Health Interventions: A Critical Literature Review. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting* (Vol. 63, No. 1, pp. 1697-1698).
- **Zahed, K.**, Sasangohar, F., Mehta, R., Erraguntla, M., Lawley, M., Qaraqe, K. (2018). Investigating the Efficacy of Using Hand Tremors for Early Detection of Hypoglycemic Events: A Scoping Literature Review. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, 62(1), 1211–1215. DOI: 10.1177/1541931218621278
- Abbas, H., **Zahed, K.**, Alic, L., Zhu, Y., Sasangohar, F., Mehta, R., ... Qaraqe, K. (2018). A Wearable, Low-cost Hand Tremor Sensor for Detecting Hypoglycemic Events in Diabetic Patients. 3.
- Zhu, Y., **Zahed, K.**, Mehta, R. K., Sasangohar, F., Erraguntla, M., Lawley, M., ... Qaraqe, K. (2018). Non-invasive Wearable System for Hypoglycemia Detection: A Proof of Concept User-Centered Design Process. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, 62(1), 1052–1056. DOI: 10.1177/1541931218621242
- McKenzie, J., **Zahed, K.**, Warner, J., Uster, H., Ferris, T. (2018). Survey and Modeling Approach to Predicting Driver Turnover in Long-Haul Trucking. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, 62(1), 1383–1383. DOI: 10.1177/1541931218621315
- Karamah, F., Awada, M., **Zahed, K.**, Mourad, F., and Nahas, Z. Modeling of Neuronal Population Activation under Electroconvulsive Therapy; *Proceedings of the International Conference on Bio-inspired Systems and Signal Processing* (2014): 229-238.

TECHNICAL & SOFT SKILLS

- User-centered research using qualitative methods such as surveys, interviews, and focus groups to understand project requirements
- Data science and machine learning techniques in R to clean, analyze, and visualize quantitative data using ggplot2.
- Effective in technical writing and oral communication
- **Programming** skills: Past experience with MATLAB, SIMIO, Tableau, Python, AMPL, SQL
- **Languages**: Fluent in English and Arabic, Intermediate in French and Spanish

AWARDS & HONORS

- Awarded the ISEN new student scholarship for the graduate program at Texas A&M University
- All-time standing on the Dean's Honor List for the undergraduate program at the American University of Beirut

EXTRACURRICULAR ACTIVITIES

- Active member of the Human Factors & Ergonomics Society (2017- Present)
- President of the Arab Student Association at Texas A&M University (2016-2017)
- News Executive and Rally paper Coordinator for the IEEE-Student Branch Conference held at AUB (2013)
- Staff Writer at American University of Beirut's "Outlook" Weekly Newspaper (2011-2012)