Lateefah Al-Naimi

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PERSONAL STATEMENT

I am a second-year Computer Science PhD student, and I am looking for a summer internship in which I can contribute to making data-driven design decisions. I am interested in understanding how users interact with a system and how to use this information to improve it. Being a long-time admirer of Spotify's user experience, I am excited to apply for the research scientist position. I believe my experience with human-computer interaction and programming, along with my recent pursuit of an education in machine learning techniques will allow me to be a solid addition to your team.

EDUCATION

PhD in Computer Science | University of Colorado Boulder *Aug '20 - present*
Boulder, Colorado

Advisor: Mirela Alistar, Living Matter Lab
Currently taking an applied machine learning course.

MSc in Human-Computer Interaction | University College London *Sep '16 - Sep '17*
London, United Kingdom

Advisor: Duncan Brumby
Dissertation: "Thematic analysis of attitudes towards automated navigation using transport services as analogies"

BSc in Computer Science | Qatar University *Sep '10 - Jun '14*
Doha, Qatar

Advisor: Osama Halabi
Senior design project: "Investigation of a haptic seat and high-fidelity driving simulator"

RESEARCH EXPERIENCE

EnrichSeq: A pipeline for analysis of metagenomic data in bacteriophage samples *Nov '20 - present*

- Co-created an algorithmic pipeline for the classification and estimation of relative abundance of bacteriophage clusters in large samples.
- Used Nextflow framework, Python, bash scripting, MegaHIT genome assembly, Kraken2 classification, and more.

Qualitative study for navigation in autonomous vehicles *May - Sep '17*

- Performed qualitative research on human factors, including trust and mental engagement involved in navigation in autonomous vehicles.
- Conducted contextual inquiry of driving scenarios where passengers had to relinquish control of navigation (Uber versus London black cabs).
- Ran pre- and post-test interviews.
- Evaluated interview transcripts using thematic analysis.

Vibro-tactile navigation in a driving simulator *Nov '13 - Oct '14*

- Implemented a virtual reality driving simulator integrated with a haptic seat and Logitech driving set.
- Developed the VR simulator with three levels of immersion: computer monitor, head-mounted display, and CAVE installation.
- Conducted a user study comparing audio and vibrotactile navigation prompts.

PROFESSIONAL EXPERIENCE

Industry

User Experience Specialist (part-time) | Droobi Health *Oct '18 - Jan '19*
Doha, Qatar

- Designed and conducted usability studies for a diabetes management mobile application.
- Proposed a variety of enhancements to the developing iOS app through sketches and wireframes

Systems Engineer | Qatar Energy (previously Qatar Petroleum) *Dec '14 - Sep '16*
Doha, Qatar

- Led the setup of an IBM landscape in a backup disaster-recovery data center.
- Maintained over 150 IBM AIX servers hosting ERP (Enterprise Resource Planning) software, including SAP.
- Coordinated with network, storage, and software development teams.

Research Intern | Bell Labs Dublin *Oct - Dec '14*
Dublin, Ireland

- Created an algorithm to pre-empt the loss of data at telecom data centers caused by unfavorable weather. The algorithm uses hourly weather updates and displays color-coded status on a Google Maps interface.
- Used Model-View-Controller and Observer software patterns to design the system.

Intern | Qatar Energy *Jun - Aug '13*
Doha, Qatar

- Rotated IT subdivisions and performed 1-2 week-long projects.
- Created a locally customized map using Google Maps API in JavaScript for the GIS (geographic information system) team.
- Created flowcharts for company procedures and wrote technical documentation.

Teaching

Teaching Assistant | University of Colorado Boulder *Jun - Jul '21*
Boulder, Colorado

Taught weekly practical sessions, held weekly office hours, and guided students in Human-Computer Interaction principles for the Fundamentals of Human-Computer Interaction course (CSCI 3002).

Teaching Assistant (full-time) | Qatar University *Jan '18 - Jun '20*
Doha, Qatar

Taught weekly programming sessions, created assessment materials, graded assignments, and provided supplementary tutorial sessions for computer science courses:

- Computer Programming (C++ course for engineering students)
- Introduction to Computer Science (for non-engineering students)
- Object-Oriented Programming
- Software Engineering
- Game Design and Development

PUBLICATIONS

Bell, F., **Al-Naimi, L.**, McQuaid, E., & Alistar, M. (2022). Designing with Alganyl. *Proceedings of the Sixteenth International Conference on Tangible, Embedded, and Embodied Interaction.* DOI: (Daejeon, Republic of Korea Feb 13-16, 2022). *Feb '22*

Halabi, O., Bahameish, M. A., **Al-Naimi, L. T.**, & Al-Kaabi, A. K. (2019). Response Times for Auditory and Vibrotactile Directional Cues in Different Immersive Displays. *International Journal of Human-Computer Interaction*, *35*(17), 1578-1585. DOI: https://doi.org/10.1080/10447318.2018.1555743 *Oct '19*

Arkonac, S. E., Frazer, J., Horgan, R. J., Kracewicz, A., & **Al-Naimi, L.** (2017). ParentCircle: Helping Single Parents Build a Support Network. In *Proceedings of the 2017 CHI Conference Extended Abstracts on Human Factors in Computing Systems* (pp. 26-32). DOI: https://doi.org/10.1145/3027063.3049271 *May '17*

Halabi, O., Hameish, M. B., **Al-Naimi, L.**, & Al-Kaabi, A. (2014). A study on the design and effectiveness of tactile feedback in driving simulator. In *2014 IEEE/ACS 11th International Conference on Computer Systems and Applications (AICCSA)* (pp. 742-746). IEEE. DOI: https://doi.org/10.1109/AICCSA.2014.7073274 *Nov '14*

Halabi, O., Hameish, M. B., **Al-Naimi, L.**, & Al-Kaabi, A. (2014, November). Optimum design of haptic seat for driving simulator. In *Proceedings of the 20th ACM Symposium on Virtual Reality Software and Technology* (pp. 233-234). DOI: https://doi.org/10.1145/2671015.2671134 *Nov '14*

SKILLS

Technical	Python, C#, Java, Javascript, C++, Unity3D, bash scripting, Jupyter notebook
User experience	User-centered design, A/B testing, think-aloud, prototyping, conducting interviews
Language	English (fluent), Arabic (fluent), Spanish (beginner)

PROJECTS

Aquarium of Morality: a virtual reality experience *Nov - Dec ‘20*

Developed a virtual reality game in Unity 3D with Oculus Quest where I present players with situations that prompt simple good or bad actions. Actions have a direct effect on an aquarium in the player’s house.

Wearable for people with bipolar disorder *Feb - Mar ‘17*

Created a prototype of a wearable wristband for mood recording of people with bipolar disorder based on heart rate readings and a mood prompt dial using various prototyping techniques and Arduino programming.

Mobile news consumption qualitative study *Dec ‘16 - Jan ‘18*

Conducted a qualitative study on the situations that prompt people to consume news on their mobile devices rather than traditional news sources.

PvP: an app for gamers *Jul ‘13 - Dec ‘13*

Co-developed a mobile platform for video gamers to share opinions on games, get updates on local gaming events, and post on the second-hand marketplace for games. The project won second place at the Startup Weekend competition in Doha, Qatar.

Haptic feedback for 3D models of museum artifacts *Oct ‘13 - Jul ‘13*

Co-developed a system that uses Microsoft Kinect depth sensors and a haptic feedback device to simulate the texture of 3D models of museum artifacts.

GRANTS & SCHOLARSHIPS

Engineering Excellence Fund *Dec ‘20*

$3000 awarded by the University of Colorado Boulder for phage therapy research using bioinformatics.

Qatar University Graduate Scholarship (PhD) *Jun ‘20*

Tuition and cost of living awarded by Qatar University for a 4-year PhD program. Awarded to high-achieving graduates showing research and teaching interests.

Qatar University Graduate Scholarship (MSc) *Aug ‘16*

Tuition and cost of living awarded by Qatar University for an MSc program at a competitive university.

Undergraduate Research Experience Program (UREP) Grant *Sep ‘13*

$4000 awarded by Qatar Foundation for research on the effectiveness of vibrotactile feedback in driving seats.

ACADEMIC SERVICE

Reviewer | ACM DIS 2021 *Mar ‘21*

Reviewer | ISWC 2021 *Jul ‘21*

HOBBIES AND INTERESTS

Traveling	I enjoy traveling solo internationally. I have visited 20 countries so far.
Climbing	Bouldering and top-rope anywhere I can find a climbing gym.
Gaming	I like role-playing games (RPGs), action RPGs, and video game soundtracks.
Sailing	Enjoyed sailing on a Laser in the Persian Gulf and hope to pick it up in Colorado.