

Ali Darejeh, PhD

Sydney, Australia
www.alidarejeh.com

045 168 4545
ali.darejeh@unsw.edu.au

University lecturer and Human Computer Interaction Researcher

Qualifications Summary

- Over 5 years of teaching and research experience in the University of New South Wales (UNSW).
- First author of 8 research papers and 7 books with over 200 citations.
- Major research interests:
 - Application of augmented and virtual reality and motion sensing devices in education and medical fields (e.g. simulated learning environment and helping patients).
 - Designing serious games for educational purposes and applying gamification techniques to increase intrinsic motivation of the users and improve learning outcomes.
 - Designing interfaces and features for enterprise systems such as medical, financial, e-learning, ubiquitous computing-based systems, mobile apps and touch-based applications.
 - Designing systems for children, elderly and people with special needs such as visual or hearing-impaired users.
 - Designing adaptive e-learning systems for specific purposes.
 - Different types of usability tests using both quantitative methods such as hierarchical task analysis, Key-action model, Keystroke-level model, and Fitt's law and qualitative methods such as in-depth interview, think aloud protocol, and observation.
- Teaching satisfaction rate of over 90% based on the university surveys from the students.
- Over 12 years of experience as a user experience (UX) researcher and software engineer in various industries.
- Participated in designing over 10 enterprise scale projects that was used by thousands of users.

Professional Experience

University of New South Wales

Academic staff

Mar. 2016 – Present

- **Research projects apart from my PhD:**
 - Hierarchical e-learning system project of CSE software engineering group.
 - Highlighter project (A financial analyser system)
 - Medical school reflection project
- **Lecturing and tutoring:**
 - Engineering Design and Professional Practice
 - Human computer interaction course
 - Software engineering course
 - Database, Spreadsheet, & Web design course
 - Ethics and management course
 - Software project
- **Professional work:** UX Designer and Software Architect of AMAC research center.
- **Research areas:** Human computer interaction, User interface design, Virtual / Augmented reality, Serious games, Gamification, E-learning systems, Cognitive load theory.
- **Achievements**

Getting a high satisfaction rate of teaching, based on students' survey results, which is higher than the average of school, faculty and the university.

High nomination rate of students supervised by me in software engineering for Macquarie software design prize.

YTML Consulting (IT consulting firm)

Senior UX Designer Consultant

Aug. 2016 – Dec. 2016, Sep. 2018 – Mar. 2019

- **Responsibilities**

Holding Interview and focus group to collect users' needs, Proposing software solutions, Architecting information, Designing wireframe, Writing design specifications, and Conducting usability tests in different stages.
- **Projects**
 - Canvas:
Web content management system for creating financial companies websites.
 - Highlighter:
A financial analyser application.
Designing an online development tool for Highlighter to enable novice users to develop financial software.
- **Achievements**

Designing the new version of the system by redesigning about 60% of the sections and adding a great number of new features based on the findings of user research.

MetLife Insurance (life insurance specialist and retirement solutions provider to Australia's leading super funds, companies and brands)

Senior UX Designer Consultant

May. 2016 – July. 2016

- **Responsibilities**

Holding Interview and focus group to collect users' needs, Writing users' persona, story & scenario, Proposing software solutions, Architecting information, Designing wireframe, Writing design specifications, and Conducting usability tests in different stages.
- **Projects**
 - Insurance Pre-assessment tool:
This system checks the eligibility of the insurance companies' customers to see whether they are eligible for a life instance.
 - Insurance quote tool:
This system helps the advisors to calculate insurance quote based on the customers' medical issues.
- **Achievements**

Designing user friendly systems by conducting different usability tests on wireframes and functional prototypes.

Guild Link (A leading company focusing on providing software solutions to the Health Care Industry, representing almost 5,000 pharmacies across Australia)

Senior UX Designer Consultant

Sep. 2015 – Mar. 2016

- **Responsibilities**

Holding Interview and focus group to collect users' needs, Writing users' persona, story & scenario, Proposing software solutions, Architecting information, Designing wireframe, Writing design specifications, Conducting usability tests in different stages, and Proposing gamification solutions.

- **Projects**

Guild Care platform:

Guild Care is Australia's No.1 pharmacy software for professional services. It supports over 28 professional service programs including 6CPA focused programs & communication solution to enable pharmacies record & report information.

- **Achievements**

Enhance the usability of Guild Care significantly in addition to applying gamification which increased users' engagement and Guild Care popularity.

HEDCo. (Hampa Energy Engineering and Design Co., one of the biggest engineering oil and gas company in Iran)

Senior UX Designer

Feb. 2008 – Jun. 2015

- **Responsibilities**

Head of portals and applications interface design team, Head of ICT training group, Holding Interview and focus group to collect users' needs, Requirement engineering, Writing users' persona, story & scenario, Architecting information, Designing wireframe, Graphic mockup & Prototype, Writing design specifications, Conducting usability tests in different stages, Preparing user manuals, Teaching developed applications to new users, Portal administrator, and Proposing gamification solutions.

- **Projects**

- HEDCo Internal and External Portals:

These portals are used by the company's personnel to have access to inter-organizational systems and by customers to see services offered by the company and to put their requests.

- HEDCo Personnel management system:

This system is a human resource management software system composed of various modules each of which is responsible for the management of one or some of the personnel's information. The main or core module is profile module. Other modules include projects chart module, mission and leave management, attendance, services, medical profile, etc.

- HEDCo Correspondence Management System

Correspondence Management is responsible for recording and managing all the correspondence incoming to or outgoing from the company. This system can send or receive letters using fax, email or simply scanning documents. It can be configured to distribute letters among the departments and expedite the reply to those letters. It is also integrated to other software systems like procurement management.

- HEDCo Procurement Management System

HPMS is a procurement management system specifically designed and implemented for oil and gas industry to manage ordering, buying and delivering projects needs.

- HEDCo Document management system

Document Management is one of the most sophisticated and complete documents management systems used in Oil and Gas industry of Iran. Document related activities such as preparation, checking, reviewing, approval and issuance can be assigned to people and can be monitored and expedited accordingly. The time spent in any activity can be registered in the Timesheet system.

- **Achievements**

Implantation of the mentioned projects made all the process of company paperless also facilitated the communication and documents management between HEDCo, partner companies and other stockholders.

Palapal Pardaze Fars (Software development company in Shiraz, Iran)

Consultant & Senior UX designer (Project-based Remote work)

June. 2014 – Sep. 2015

- **Responsibilities**

Project consultant, Conducting quantitative research & interview to collect users' needs, Requirement engineering, Writing users' scenario, Architecting information, Designing wireframe, Graphic mockup & Prototype, Writing design specifications, and Usability testing.

- **Projects**

- Mobile App developer service website
An online service which sells web services for developing android-based mobile apps without having any knowledge in programming.
- Hotel Homa Mobile App
A mobile app for a chain hotel in Iran to provide customers with hotel services, hotel reservation, & etc.
- Parseh Travel Agency Mobile App
A mobile app for Parseh Travel Agency which presents their domestic and international travel packages, their visa services, introduces tourists' attractions around the world, and provides hotel reservation feature to customers.
- Motamam Training Center Mobile App
A mobile app for Motamam training center which presents their training classes, syllabus covered in each class, a quick demo of each class and access their online radio.
- Shiraz University Kindergarten Mobile App
A mobile app for Shiraz kindergarten to present their services, facilities, and collect parents' comments and ideas.

Dade Pardazi Hoshmand (Software development company in Tehran, Iran)

Consultant & Senior UX designer (Project-based Remote work)

Sept. 2011 – Sep. 2015

- **Responsibilities**

Project consultant, Conducting quantitative research & interview to collect users' needs, Requirement engineering, Writing users' scenario, Architecting information, Designing wireframe, Graphic mockup & Prototype, Writing design specifications, and Usability testing.

- **Projects**

- International development bank website
This website is developed for IDB bank for presenting banking services to customers and providing users with online banking services.
- Diamond Master Card services website
This website is developed for providing credit card services to customers.
- VIRA Card services website
A similar project to Diamond project, targeting different types of card.
- Haft Khan Restaurant Mobile App
A mobile app for Haft Khan Restaurant to provide customers with restaurant services, menu, collect their opinions & etc.
- Shiraz City Mobile App
A mobile app for tourists who want to visit Shiraz. It is a full encyclopaedia of Shiraz attractions, shopping centres, hotels, & etc.

University of Malaya (Kuala Lumpur, Malaysia)

Research Assistant

June 2013 – Jan. 2014

- **Project**

Speech pronunciation and practice system

- **Responsibilities**
Evaluating the features of existing speech pronunciation and practice systems, needs analysis and solution proposal for developing a new speech pronunciation and practice systems.
- **Achievements**
Developing a new speech pronunciation and practice system for Malaysian school children based on the findings.

IT institute of Shiraz University (Shiraz, Iran)

University Tutor Lecturer (part-time)

March 2006 – May 2008

- **Courses Offered:** Human computer interaction, Developing Microsoft Office based software with Macro, Web development with Microsoft SharePoint & HTML, Windows programming with C# and VB.NET, Microsoft Office.

Behdad IT institute (Shiraz, Iran)

Instructor (part-time)

April 2005 – Nov. 2006

- **Courses Offered:** ICDL full course, Developing Microsoft Office based software with Macro, Web development with Microsoft SharePoint, Windows programming with C# and VB.NET.

Publications:

- [1] Darejeh, A., Marcus, N., Sweller, J. (2021). The effect of narrative on novice users' cognitive load while learning software applications via E-learning platforms. Educational Technology Research and Development. <https://doi.org/10.1007/s11423-021-10024-5>
- [2] Darejeh, A., Salim, S. S., & Asemi, A. (2017). Speech pronunciation practice system for speech-impaired children: a systematic review of impacts and functionality. Universal Access in the Information Society, 18(1), 169-189.
- [3] Darejeh, A., & Salim, S. S. (2016). Gamification solutions to enhance software user engagement—a systematic review. International Journal of Human-Computer Interaction, 32(8), 613-642.
- [4] Darejeh, A., & Singh, D. (2014). An investigation on Ribbon interface design guidelines for people with less computer literacy. Computer Standards & Interfaces, 36(5), 808-820.
- [5] Darejeh, A., Pajouh, H. H., & Darejeh, A. (2014). An Investigation on the Use of Expert Systems in Developing Web-Based Fitness Exercise Plan Generator. International Review on Computers and Software.
- [6] Darejeh, A., & Singh, D. (2014). Increasing Microsoft Office usability for middle-aged and elder users with less computer literacy. Journal of Industrial and Intelligent Information Vol, 2(1), 56-62.
- [7] Darejeh, A. (2014). How to Improve Interface Usability for Novice Users: A Reference Guide for Software Developers and Interface Designers. Saarbrücken, Germany: LAMBERT Academic Publishing.
- [8] Darejeh. (2013). A review on user interface design principles to increase software usability for users with less computer literacy. Journal of Computer Science, 9(11), 1443–1450.
- [9] Darejeh, A., Daei, B., & Asadzadeh, J. (2011). Reference of SharePoint 2010 User Guide and Programing. Saaher Engineering Publication.
- [10] Darejeh, A. (2011). Reference of Access 2010 and Access Programing. Tehran, Iran: Saaher Engineering Publication.
- [11] Darejeh, A. (2010). Reference of PowerPoint 2010. Saaher Engineering Publication.
- [12] Darejeh, A. (2009). Reference of Word 2007 and Word Programming. Saaher Engineering Publication.
- [13] Darejeh, A. & Dehghani, A. and S. Mashayekh. (2008). Reference of Excel 2007 and Excel Programming. Saaher Engineering Publication.
- [14] A. Darejeh. (2007). Computer Learning for Kids. Takhte-Jamshid.

Conferences

- [1] Darejeh, A., Marcus, N., Sweller, J. (2019). Comparing static content, animation and Interactive animation while teaching software through narrative-based e-learning systems. International Cognitive Load Theory Conference 2019, Maastricht, Nederland.
- [2] Darejeh, A., Marcus, N., Sweller, J. (2018). The effect of gamification on novice users' cognitive load while learning software via E-learning systems. International Cognitive Load Theory Conference 2018, Beijing, China.
- [3] Darejeh, A., Marcus, N., Sweller, J. (2017). How to decrease cognitive load to facilitate learning software applications through e-learning systems. International Cognitive Load Theory Conference 2017, Wollongong, Australia.
- [4] Darejeh, A. (2013). Increasing Microsoft Office Usability for Middle-Aged and Elder Users with Less Computer Literacy. The 2nd International Conference on Software and Intelligent Information, Hong Kong.

Education

- Ph.D. Computer Science, University of New South Wales, Sydney, Australia, 2016 –2020
Thesis: Human computer interaction by focusing on application of gamification in e-learning systems.
- M.S., Information Technology, National University of Malaysia, Bangi, Kuala Lumpur, Malaysia, 2011- 2013
(UKM is the second high ranked university in Malaysia and ranked by QS as 141st university in the world)
Thesis: User interface design patterns for users with limited computer literacy.
- B.S., Industrial Management, Shiraz Azad University, Shiraz, Iran, 2002- 2007
(SIAU is one of the 5 best branches of Azad University)
Thesis: User interface design patterns for developing organizational software in oil and gas industries.

Certifications

- **Microsoft Certified Professional (MCP)** in Windows application development, License 3329820, 2005, Microsoft, USA
- **Microsoft Certified Professional (MCP)** in Web application development, License 3329820, 2005, Microsoft, USA
- **Official IT consultant**, License 20286332, 2010, National Computer Guild System Organization, Iran
- **Gamification**, License TJ337VRLPQ, 2015, University of Pennsylvania, USA
- **Human-Computer Interaction**, License 8048, 2015, Interaction Design Foundation (IDF), Denmark
- **Mobile User Experience Design**, License 8048, 2015, Interaction Design Foundation (IDF), Denmark
- **Conducting Usability Testing**, License 8048, 2015, Interaction Design Foundation (IDF), Denmark
- **Web Design for Usability**, License 8048, 2015, Interaction Design Foundation (IDF), Denmark
- **Gamification Creating Addictive User Experience**, License 8048, 2015, Interaction Design Foundation (IDF), Denmark
- **UI Design Patterns for Successful Software**, License 8048, 2015, Interaction Design Foundation (IDF), Denmark
- **Dynamic User Experience: AJAX Design and Usability**, License 8048, 2015, Interaction Design Foundation (IDF), Denmark

Awards

- Best presentation award in CSE research symposium 2018, Awarded by School of computer science, UNSW.
- Best research student award 2018, Awarded by ARC and postgraduate research committee, UNSW.

Membership

Information and Computer Security Journal by EnPress publishing group

Editorial board

Starting 2017

Software Engineering Journal by Science Publishing Group

Editorial board

Starting 2016

SpringerLink journal Neural Computing and Applications

Reviewer board

Starting 2015

Interaction Design Foundation (IDF)

Member

Starting 2015

National Computer Guild System Organization

Member of IT counselor

Starting 2010

References

Nadine Marcus

UNSW senior lecturer (school of computer science)

Sydney, Australia

nadinem@cse.unsw.edu.au

Land line: +61 2 9385 5173 (Internal: x55173)

Fethi Rabhi

UNSW professor (school of computer science)

Sydney, Australia

f.rabhi@unsw.edu.au

Land line: +61 2 9385 4179 (Internal: x54179)

John Sweller

UNSW professor (school of education)

Sydney, Australia

j.sweller@unsw.edu.au

Mobile: +61 432 555 764

Patsie Polly

UNSW professor (school of medical science)

Sydney, Australia

patsie.polly@unsw.edu.au

Land line: +61 2 9385 2924