

I am a research scientist at Google Brain, developing tools for understanding deep learning and improving its societal impact, particularly relating to fairness. Previously, I founded and led the Advanced Analytics team at Saudi Aramco, managed the company's Enterprise Analytics program, and was a technical lead at its digital transformation program.

EDUCATION

Doctor of Philosophy - PhD, Computer Science , KAUST, GPA: 4.0 / 4.0	2012 — 2017
Master of Science, Electrical Engineering , Stanford University, GPA: 4.15 / 4.0 Emphasis on networked systems, artificial intelligence, and operations management.	2009 — 2011
Bachelor of Science, Computer Engineering , University of Nebraska, Lincoln, GPA: 3.98 / 4.0 Highest Distinction, Minor in Economics.	2000 — 2005

SKILLS

Research & Development	1 book, +25 research papers, 1 granted patent and 3 pending patents.
Communication	English (fluent), Arabic (native), German (elementary, A1).
Technical	Data science, artificial intelligence, modeling & optimization, digital transformation, networked systems (certified by Cisco, Juniper and Alcatel-Lucent).
Leadership	+2 years managing corporate-wide enterprise analytics program, leading the advanced analytics team, and serving as a technical lead at digital transformation program at Saudi Aramco.

SELECTED ACTIVITIES

Program committee member at NeurIPS, ICML, ICLR, AAAI, and IJCAI.	2017 — Present
Reviewer for TMLR, IEEE PAMI, IEEE TNNLS, and IEEE Communications Letters.	2019 — Present
Member of the S20 Task Force (Digital Revolution).	2020
Chair of AI track of the 2019 Arab-American Frontiers Symposium.	2019

AWARDS

Outstanding reviewer award, NeurIPS	2016
KAUST Provost Award.	2012
Saudi Aramco, Operation Services Business Line Recognition Award for "distinguished achievements."	2012
Saudi Aramco, Communications Engineering Dept recognition award for "significant contributions" to department's success.	2009
Saudi Aramco, Information Technology recognition, for "developing innovative solutions."	2007
University of Nebraska, Superior Scholarship Award.	2005

PROFESSIONAL EXPERIENCE

RESEARCH & DEVELOPMENT SCIENTIST <i>Google, Brain Team</i>	NOV 2019 — Present <i>Zürich, Switzerland</i>
<ul style="list-style-type: none">Led / co-led several projects to improve understanding of deep learning and improving its fairness; e.g. pretraining with random labels, debiasing neural networks and datasets, data scaling laws, and calibration.Key member of a moonshot team for machine learning fairness in healthcare.Member of the Google Scholarship review team and mentor of AI residents.	
LEAD, ADVANCED ANALYTICS <i>Saudi Aramco, Corporate Applications Dept</i>	NOV 2017 — OCT 2019 <i>Dhahran, Saudi Arabia</i>
<ul style="list-style-type: none">Founded and led the Advanced Analytics team that was responsible for developing AI solutions, managing analytics infrastructures, conducting research collaboration with academia, evaluating technologies, and developing roadmaps.Technical lead at the Digital Transformation Program, with a mission to accelerate the adoption of artificial intelligence at the company. Sectors include downstream, supply chain, sales & marketing, IT, geospatial, cybersecurity and HR.	
PERFORMANCE ENGINEER <i>Saudi Aramco, Comm. Eng. Department</i>	JUN 2011 — AUG 2012 <i>Dhahran, Saudi Arabia</i>
<ul style="list-style-type: none">Performance management and capacity planning for enterprise communications services such as the Data Center, the Internet, Extranet, and Wireless LAN infrastructures.Developed an analytics tool for automated performance analysis and SLA compliance assessment.	
DATA NETWORK ENGINEER <i>Saudi Aramco, Comm. Eng. Department</i>	JUL 2005 — AUG 2009 <i>Dhahran, Saudi Arabia</i>
<ul style="list-style-type: none">Key member of an 18-month IT network security project for securing critical facilities.Project manager for a 1-year CCTV surveillance camera systems project (involving civil and communications work).Design, installation, configuration, reviews, upgrades, and troubleshooting of data networks.	