

EDUCATION

Massachusetts Institute of Technology (MIT)

Candidate for double major B.S. in Physics & B.E. in Electrical Engineering

Cambridge, MA
Sep 2012 - Jun 2016

PROFESSIONAL & RESEARCH EXPERIENCE

Strategic Consulting at Booz Allen Hamilton

Consultant

Riyadh, Saudi Arabia

- Gathered data, conducted interviews, and synthesized findings to present an overview of the global desalination market, a benchmark of the KSA desalination industry, and a strategy for future improvements

Perovskite solar cell research at KAUST, Prof. Osman Bakr's Photovoltaic Research Group

Research Assistant

Thuwal, Saudi Arabia
Jun 2014 - Jul 2014

- Fabricated solar cells using etching, spin coating, vapor deposition, dipping & sputtering
- Tested & characterized surface types & efficiencies using ESM, NMR/IR spectroscopy & optical microscopes

Ion Cavity Trap at MIT, Prof. Isaac Chuang's Quantum Computing Group

Undergraduate Researcher

Cambridge, MA
Sep 2013 - Feb 2014

- Designed a feedback system that keeps an ion afloat above a series of radio frequency antennas
- Converted the radio wave frequencies from analog signal to a digital & created a network to send the data to the main computers for processing
- Created a stabilizing algorithm using the analyzed data to vary the RF waves & keep the ion stable.
- This resulted in better measurements of the ion's quantum numbers that will help creating quantum computers

Ion Pumps at MIT, Prof. Ghoniem's Efficient Combustion Group

Undergraduate Researcher

Cambridge, MA
May 2013 - Jun 2013

- Developed python code that analyzes +2,000 data points from oxygen rich combustions, then visualized the findings along with a summary, which guided the research towards more efficient combustion parameters
- Designed & constructed additional lab equipment using SolidWorks

Trainee for the International Physics Olympiad 2011 (IPhO)

- Theoretical and experimental training for the Saudi IPhO team with Dr.Sandu Golcea and Dr.Hans Jordans
- First Saudi national to win an award at the International Physics Olympiad (Honorable Mention)

Bangkok, Thailand
Jan 2011 - Jul 2011

LEADERSHIP & ACTIVITIES

McKinsey&Company EDAD Training Program

- Participated in a weekend program with practice cases, consultant experience talks, and leaderships workshops

Boston, MA
Apr 2015

MIT Saudi Student Association

Vice President

Cambridge, MA
May 2014 - Present

- Lead successful talks at MIT by prominent Saudi speakers, and cultural events with food and entertainment

Kappa Sigma Fraternity, Gamma Pi Chapter

Philanthropy Chairman, Rush Chairman

Cambridge, MA
2013 - 2014

- Raised over \$1,000 for the American Cancer Society by coordinating and leading two large philanthropy events
- Planned & managed over 50 events for MIT's Campus Preview Weekend and Rush

Middle East & North Africa Career Fair

Publicity Chairman

Cambridge, MA
2013 - Present

- Currently organizing the first Middle East & North Africa career fair at MIT to be held in Spring 2015

SKILLS & AWARDS

Languages: Fluent in English and Arabic

Device skills: Oscilloscope, Solder, Ohm & Volt-Meter, Spectrometer, Surface Electron Microscope, Plasma Cleaners, Clean Box

Programming: Java, Python, Mathematica, Matlab, C/C++, LATEX, html, css (bootstrap)

Award: Recipient of, the graduate university, King Abdullah University's scholarship for gifted students (May 2012)