

# QUSAI AL SHIDI

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Lowell, MA

Updated: 12/19/18

## EDUCATION

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<b>Ph.D. Physics</b> , University of Massachusetts—Lowell	<b>Continuing</b>
<b>B.Sc Physics</b> , University of Toledo	<b>May 2012</b>

## RESEARCH EXPERIENCE

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<b>University of Massachusetts--Lowell</b> <b>Graduate Student</b> , Research Advisor: Ofer Cohen	<b>Continuing</b>
<ul style="list-style-type: none"><li>• Wrote a two-fluid collisional MHD code from scratch for the solar chromosphere and simulated and analyzed results.</li></ul>	
<b>University of Toledo</b> <b>Undergraduate Student</b> , Research Advisor: Jacques Amar	<b>2011</b>
<ul style="list-style-type: none"><li>• Thin-film growth simulations</li><li>• C &amp; C++ programming</li></ul>	
<b>Sultan Qaboos University</b> <b>Undergraduate Student</b> , Research Advisor: Salim Al-Harthy	<b>2009 &amp; 2010</b>
<ul style="list-style-type: none"><li>• Nanotechnology research<ul style="list-style-type: none"><li>○ X-ray photoelectron spectroscopy</li><li>○ Scanning Tunneling Microscope experience</li></ul></li></ul>	

## JOB EXPERIENCE

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<b>Teaching Assistantship</b> , Lowell, MA University of Massachusetts—Lowell	<b>2014-2016</b>
<ul style="list-style-type: none"><li>• General Physics lab instructor.</li></ul>	
<b>Adjunct Faculty</b> , Lowell, MA University of Massachusetts—Lowell	<b>2014-2016</b>
<ul style="list-style-type: none"><li>• Teaching physics recitation to NAVITAS (English as a second language) students.</li></ul>	
<b>Computational Geophysics Intern</b> , Muscat, Oman Gulf Energy LLC	<b>2012</b>
<ul style="list-style-type: none"><li>• Numerical analysis of oil drilling operations</li></ul>	

## PUBLICATIONS

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*Qusai Al Shidi, Ofer Cohen, Paul Song, Jiannan Tu*, Time-Dependent Two-Fluid Magnetohydrodynamic Model and Simulation of the Sun's Chromosphere. Solar Physics, submitted.

## PRESENTATIONS AND POSTERS

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- Poster - ‘Two-Fluid Magnetohydrodynamic Model and Simulation of the Sun’s Chromosphere’ **SHINE meeting, Cocoa Beach, FL, 2018**
- Poster - International Symposium for Space Simulations **UCLA, CA, 2018**
- Poster – Fall AGU meeting, ‘Time-Dependent Two-Fluid Collisional ‘Magnetohydrodynamic Model and Simulation of the Chromosphere’ **DC, 2018**

## PROFESSIONAL TRAINING AND WORKSHOPS

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### **International School for Space Simulations** **2018**

UCLA, CA

- Learned to use many kinds of space physics codes like particle-in-cell, MHD and kinetic codes.

### **Space Weather Summer School** **2018**

Boulder, CO

- Week long summer school for graduate students that cover a broad range of physics ranging from the sun to the earth’s atmosphere.

### **SHINE Student Day** **2018**

Cocoa Beach, FL

- Workshop on general topics of heliophysics.

### **C & C++ Programming** **2003**

Qurum Training Institute, Muscat

## COMPUTER SKILLS

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### **Programming Languages:**

- C++, C, Python, MATLAB, GNU Octave, parallel computing
- Space Physics Modeling
  - Magnetohydrodynamics
- Numerical Simulations
- General Purpose Computing with GPUs.

**Platforms:** Linux, Windows

## HONORS AND AWARDS

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### **Donalds S Park's Outstanding Program Award** **2012**

University of Toledo, OH

- Co-coordinated BASHCon XXVII an non-profit convention that spanned 1000 attendees and had a budget of approximately \$10,000.

### **Donalds S Park's Outstanding Program Award** **2011**

University of Toledo, OH

- Co-coordinated BASHCon XXVI an non-profit convention that spanned 1000 attendees and had a budget of approximately \$7000.

**College of Arts and Sciences Dean's List**  
University of Toledo, OH  
**College of Arts and Sciences Dean's List**  
University of Toledo, OH

**Fall 2009**

**Spring 2009**

**COMMUNITY SERVICE**

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- Volunteer Science Fair Judge for Lowell Schools** **2015**  
Lowell, MA
- Judged a general science fair for Lowell Public Schools students.
- Graduate Physics Association** **2015**  
University of Massachusetts—Lowell, MA
- Webmaster
- University of Toledo's Feminist Alliance** **2012**  
Toledo, OH
- Recorder and volunteer
  - Attended the National Young Feminists Leadership Conference in Washington, DC. March 2012.
- UT-BASH** **2010-2012**  
Toledo, OH  
Student Club for board games and others. Took leadership roles such as:
- Vice President, Toledo, OH **2010**
  - President, Toledo, OH **2011**
  - BASHCon Coordinator, Toledo, OH **2011-2012.**
- Physics and Astronomy Summer Camp** **2011**  
Toledo, OH
- Volunteering with setup and teaching high-school students in an evening of Physics and Astronomy.
- College of Arts & Sciences Student Council** **2010**  
Toledo, OH
- Science Delegate
- Society of Physics Students** **2010**  
Toledo, OH
- Web Master and Outreach Coordinator

**LANGUAGES**

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**English:** First Language, fluent speaker, advanced writer.

**Arabic:** Native Language

## REFERENCES

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**Dr. Ofer Cohen**

PhD. Advisor

Lowell Center for Space Science and Technology (LoCSST)

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