**Meera Wakim**

meerawakim@utexas.edu

Austin  (281) 900-5197  U.S. Citizen

**EDUCATION**

**The University of Texas at Austin**

Bachelor of Science in Mechanical Engineering December 2018

Texas Business Foundations Summer Institute Summer 2016

Elements of Computing Certificate December 2018

*Related Courses:* Elements of Software Design, Probability and Statistics, Fluids, Dynamics, Thermodynamics, Computational Methods, Engineering Graphics and Design

**EXPERIENCE**

**Socially Intelligent Machines Lab (Robocup@Home League)** – *Intern*; Austin, Texas Summer 2017

* Integrated OpenPose into a R.O.S. (Robot Operating System) environment in order to successfully superimpose a skeleton over a human frame in order to implement gesture recognition.
* Created a R.O.S. node that uses Toyota HSR data as input in order to generate a PDF report of the team’s task progress
* Collaborated with a team of 35 graduate students to prioritize certain challenges from the Robocup@Home League, and to delegate tasking and set a definitive production timeline**.**

**University of Texas Nuclear Robotics** – *Student Researcher;* Austin, TexasAugust 2015 – April 2016

* facilitated the development of a fully automated system that can execute object recognition using three-dimensional point cameras in order to quickly add new items to a recognition set
* Utilized Python in a Linux-based operating system (Ubuntu) in order to run R.O.S.

**Wood Group Mustang Engineering** – *Student Intern;* Houston, Texas October 2014 – April 2015

* Pioneered and developed 4D-modeling, which integrates 3D models with construction scheduling to visually simulate project build processes based on a specified timeline. This is now used to equip Mustang with a competitive edge
* Systematized Closeout Report Data Collection and constructed a program to predict future project statistics based on past information

**ACADEMIC PROJECTS**

**ME 302 Reverse Engineering Project** – Team LeaderJanuary 2016 – May 2016

* Led a team of 5 people in deconstructing an aluminum portable bike pump
* Designed and displayed the parts three dimensionally using Solidworks; built a tangible model using rapid prototyping

**LEADERSHIP EXPERIENCE AND ACTIVITIES**

**Robotics Automation Society (RAS)** – Committee Head, Historian, Team leader September 2015 - Present

* *Region V:* Led an interdisciplinary team to compete in a national competition hosting 30 universities showcasing an autonomous laser-cut, holonomic drive robot that uses sensor input to map a field, visually process images, and lift field objects. Leadership responsibilities included mechanical design, responsibility delegation, and budget management
* *Robotathon:* Built and three dimensionally modeled a competitive laser-cut holonomic drive robot.

**Capital One Summit for Developing Leaders** January 2017

* competed in a weeklong, highly selective case competition with a 15% acceptance rate and presented a web application designed to educate young consumers in financial responsibility and literacy.

**Longhorn Racing Electric** – Machinist September 2016 - Present

* Interacted with steel and aluminum material to macine electric vehicle parts using horizontal band saws, lathes, and milling macines

**American Society of Mechanical Engineers (ASME)** –Active Member September 2015 - Present

**Women in Engineering (WEP)** – Active Member September 2015 - Present

**Society of Petroleum Engineers (SPE)** – Active Member September 2015 - Present

**HONORS**

UT Makeathon Competition– First Place October 2016

* Designed and built a handmade system to transport delicate entities from an elevated

position to ground level

Society of Petroleum Engineers Scholarship *(8 semesters)* 2015-2019

Texas Exes Alumni Scholarship *(2 semesters)* 2015-2016

Excellence in Technical and Career Education Award 2015

**ADDITIONAL INFORMATION**

**Computer Skills:** Python, Java, Matlab, R (statistical computing), Solidworks, Processing Graphics Library, HTML, CSS, MS Word, Excel

**Engineering Skills:** Machine Shop Training (i.e. milling machine, lathe), Wood Shop Training (i.e. table saw, miter saw), Laser Cutter Operation, 3D Printing, PDS Primavera Project Scheduling

**Languages:** Fluent in English and Arabic, Conversational Mandarin