8541 Copano Dr, Austin, TX 78749│+1 (737) 247-6100 │ amar\_hajjahmad@yahoo.com

**EDUCATION**

**The University of Texas at Austin** May 2018

 *Bachelor of Science, Mechanical Engineering ▪ GPA: 3.97*

*Certificate, Advanced Design and Manufacturing ▪ Minor, Mathematics*

**FULLTIME WORK EXPERIENCE**

 **Wilder Systems Robotics;** Austin, Texas 08/18 – 09/18 *Mechanical Engineer*

* Managed technical project scope and created a formal testing plan for the robotic drilling unit
* Prepared technical and commercial project proposals
* Translated aerospace industry standards and regulations to train a group of engineering operators
* Conducted mechanical fabrication and design of advanced aerospace robotic systems

**INTERNSHIP EXPERIENCE**

**Fabrication Lab, Institute for Advanced Architecture of Catalonia;** Barcelona, Spain 06/17 – 07/17

*Fabrication Assistant*

* Designed and assisted in the manufacturing of a large-scale extruder operated by a KUKA robotic arm
* Implemented CAD design skills on Solidworks and Rhino interfaces
* Assisted in the manufacturing and assembly of various architectural projects in the FAB Lab
* Provided technical engineering design consult and insight to the architectural fabrication team

**RESEARCH**

**Combustion and Additive Manufacturing with Dr. Janet Ellzey;** UT Austin09/16 – Present

*Undergraduate Research Assistant*

* Conducted independent research on iterative experiments directed towards improving combustion chamber design using additive manufacturing
* Received the first-place award in the Mechanical Engineering Research Poster Competition
* Demonstrated skills in calibration, manufacturing and experimental design
* Conducted research on potential flow theory and flame stabilization for future publications

**Engine Calibration with Dr. Ronald Matthews;** UT Austin09/16 – 09/17

*Undergraduate Research Assistant*

* Gained a technical understanding of engine operation and design
* Improved mechanical and teamwork skills while prepping the FSAE race-car engine

**PART-TIME WORK EXPERIENCE**

**ASE/EM Tutoring Center;** UT Austin 09/16 – 05/18

*Engineering Tutor*

* Explained engineering concepts in the fields of Statics, Mechanics of Solids, and Dynamics
* Provided insight on problem solving skills and approaches to students in various engineering majors
* Collaborated with other tutors in order to solve intricate engineering problems

**SKILLS & COURSEWORK**

* **C**ourses: Additive Manufacturing, Mechanical Measurements, Thermal Fluid Systems
* Machining**:** Knowledgeable in operating the lathe, mill, laser cutters, and 3D printers
* Computer:Solidworks CAD; LabVIEW; MATLAB; Multisim; Microsoft Office; Rhino
* Languages**:** Advanced Arabic and Elementary French

**AWARDS AND ACCOMPLISHMENTS**

* Academic Affairs Chair: Mechanical Engineering Undergraduate Advisory Board (2016 – 2018)
* Recipient: Ford Motor Company Scholarship (2017 – 2018)
* Recipient: George T. Karpos Friend of Alec Excellence Fund Scholarship **(**2016 – 2017)
* Member: UT FSAE (Longhorn Racing) Engine and Manufacturing Sub-Team (2016 – 2017)