Mateo Mariscal

EDUCATION

MIT. CLASS OF 2020

MECHANICAL ENGINEERING WITH COMPUTER SCIENCE (2A6) CONCENTRATION: ECONOMICS Cum. GPA: 4.9/5.0

RELEVANT COURSEWORK:
MECHANICS & MATERIALS I,
CONTROLS & DYNAMICS I, DESIGN &
MANUFACTURING, COMPUTATIONAL
STRUCTURES, FLUIDS, ELECTRONICS,
PRODUCT ENGINEERING PROCESSES,
THERMODYNAMICS, DIFFERENTIAL
EQUATIONS, NUMERICAL METHODS,
MEASUREMENT/INSTRUMENTATION,
MACHINE LEARNING, ALGORITHMS

HARVARD UNIVERSITY

RELEVANT COURSEWORK:

DUAL ENROLLMENT IN HIGHSCHOOL

MULTIVARIABLE CALCULUS
PRINCIPLE OF ECONOMICS [H.EXT]
STARS & STELLAR SYSTEMS [H.EXT]

CAMBRIDGE RINDGE & LATIN

Cum. GPA: 4.0/4.0

RELEVANT COURSEWORK: AP CALC BC, AP STAT, AP CS, AP PHYSICS, PRINCIPLES OF ENGINEERING, DIGITAL ELECTRONICS

SKILLS

SOFTWARE

CATIA • SolidWorks • Rhino • Inventor Simulink • AVL Cruise • CarSim • AWS Eagle • Photoshop • Illustrator

PROGRAMMING

Python • Matlab • Command Line • C C++ • HTML/CSS • LATEX • ¡Query • Java

MACHINING

OMAX Water Jet • 3-axis Milling • Lathe CNC ShopBot • Laser Cutter • PCB Mill Blacksmithing • Sandblast • MIG Welder

LEADERSHIP & SERVICE

Tau Beta Pi Engineering Honors Society Pi Tau Sigma MechE Honors Society MIT Brazil Global Startup Labs 2020 GEs Dare to Lead 2017 MIT Liaison for March for Science

WORK EXPERIENCE

STEALTH MODE STARTUP | FOUNDING ENGINEER

August 2022 - Present | Brooklyn, NY

BOSTON DYNAMICS | SENIOR MECHANICAL ENGINEER

June 2020 - July 2022 | Waltham, MA

• Designed and managed accelerated life test stands that evaluated virtually every assembly of Stretch, as well as manufacturing automation stands

TESLA MOTORS | MECHANICAL ENGINEERING COOP FOR CLOSURES February – August 2019 | Fremont, CA

- Designed and released parts and assemblies for Model S, 3, X, & Y.
- Designed a new seal system for R&D that improves vehicle NVH performance by 2.5 dB. Tesla is conducting a patent search for the concept.
- Managed general assembly deviation trials and design of manufacturing jigs.
- Conducted material property tests and system-level durability tests.

CLEARMOTION | MECHANICAL ENGINEERING INTERN

May - Aug 2018 | Woburn, MA

- Redesigned structural components of linkage mechanism in active seat.
- Created GUI for data collection & processing for a study on vehicle motion.

STARS & STELLAR SYSTEMS [H.EXT] PRIMUS POWER | MECHANICAL ENGINEERING INTERN

January 2018 | Hayward, CA

• Designed an accelerated life durability test platform a 3-way mixing valve.

CHANGING PLACES | Undergraduate Researcher

September 2016 - December 2017 | Cambridge, MA

- Managed fabrication and involved in design of an autonomous vehicle.
- Designed a self-balancing platform for personal transportation, and SLAM.

INSIA INSTITUTE FOR AUTOMOTIVE RESEARCH | MECHANICAL ENGINEERING INTERN

June - July 2017 | Madrid, Spain

- Used Simulink to interface CarSim & AVL Cruise to co-simulate vehicle tests.
- Created vehicle dynamic simulations to calculate / analyze rolling resistance, brake force distribution, slip angle, vehicle forces, etc.

CENTER FOR BITS AND ATOMS | MIT Assistant Shop Supervisor February - August 2016 | Cambridge, MA

Trained to use and service shop machines

• Made a remote controlled electric long board as my independent project.

Blacksmithing • Sandblast • MIG Welder HARVARD CENTER FOR ASTROPHYSICS | SOFTWARE INTERN

June 2014 - March 2015 | Cambridge, MA

• Devised a voltage controller with a touchscreen interface currently fielded at the Submillimeter Array in Hawaii.

CERTIFICATIONS

GeoTol 20 Hour GD&T Training OSHA General Industry Course

LANGUAGES

Fluent: English, Spanish Intermediate: Portuguese