

# IÑIGO DE LA MAZA

(857) 242-8354 | [DELA MAZA@MIT.EDU](mailto:DELA MAZA@MIT.EDU) | [WWW.IDELAMAZA.COM](http://WWW.IDELAMAZA.COM)

---

Passionate data scientist, highly skilled in machine learning, data visualization and creative thinking. Proven ability to explain and present mathematical concepts and results to technical and non-technical audiences. Looking to leverage my multidisciplinary background to help solve challenging data-centered problems.

## EDUCATION

---

### Massachusetts Institute of Technology (MIT)

Feb. 2019 - Present

*Visiting student*

*Cambridge, MA*

- Master's Thesis at IMES: *"Tailoring Systems Pharmacology through Computational Models"*
- MIT 15.095 - *Machine Learning Under a Modern Optimization Lens* (Prof. Dimitris Bertsimas)
  - Convex, robust, and mixed integer optimization in machine learning
- MIT 2.98 - *Sports Technology: Engineering & Innovation*
  - Team leader in data science project for an international sport industry organization in team of seven
- MIT 6.S191 - *Introduction to Deep Learning*
  - Learned how to build, train and evaluate different Deep Learning architectures (CNN, GAN, LSTM)

### EAE Business School

Sept. 2018 - Apr. 2020

*Candidate for Online MBA*

*Barcelona, Spain*

- Master's Thesis on the economics of data, and its influence on corporate success and value creation
- Relevant coursework: Operations Logistics, Control Management, Managerial Skills, Cost Management

### Technical University of Catalonia (UPC)

Sept. 2017 - May 2020

*Candidate for MS in Industrial Engineering; minor in Biomedical Engineering*

*Barcelona, Spain*

- GPA: 3.60/4 | 3 courses with honors
- Relevant coursework: Industrial Scheduling, Transport Networks, Business Management, Modelling and Simulation of Biomedical Systems, Technological Innovation, Process Control

### Technical University of Darmstadt

Mar. 2017 - Aug. 2017

*Visiting Student*

*Darmstadt, Germany*

- Bachelor's Thesis at PTW: *"Potential analysis and pre-design of an additive manufactured floating bearing bushing for motor spindle drives"*

### Public University of Navarre (UPNA)

Sept. 2013 - Aug. 2017

*BS in Industrial Engineering; minor in Mechanical Engineering*

*Pamplona, Spain*

- GPA: 3.45/4 | Rank: 8/122 (top 6.5%) | 4 courses with honors
- Relevant coursework: Statistics, Control Theory, Numerical Methods, Advanced Physics, Calculus

## PROFESSIONAL EXPERIENCE

---

### MIT Clinical Research Center

Feb. 2019 - Present

*Research Affiliate*

*Cambridge, MA*

- Applied mathematical modeling, computational statistics and ML in cardiovascular-related biomedical projects
- Developed a mathematical model of blood coagulation under flow conditions

### Research Center for Biomedical Engineering (CREB) @ UPC

Feb. 2018 - Feb. 2019

*Research Scientist*

*Barcelona, Spain*

- Led biomechanics research project with industry partners (NISSAN, Meleghy Automotive) about the use of industrial exoskeletons in car manufacturing assembly lines (press coverage: [1,2,3](#))
- Directly influenced a change in state regulatory policies by proving that the use of exoskeletons in the automotive sector can reduce the muscular effort of workers by up to 60%
- Held roles in project management, budget negotiation, data pipeline implementation and data analysis

## RELEVANT PROJECTS/COURSES

---

<b>Data Science projects</b>	<b>2019 Data Science Bowl   Kaggle</b> <ul style="list-style-type: none"><li>· Prediction of children performance in educational game apps</li><li>· Used Optimal Classification Trees (OCT) and mixed integer optimization</li><li>· Designed feature engineering pipeline and optimization models</li></ul> <b>Automatic event detection in football</b> <ul style="list-style-type: none"><li>· Led team of seven in the development of a ML-based model for automatic event detection and classification in football using real-time tracking data</li><li>· Adopted agile development methodology with weekly meetings with the client (international sports association), and deployed a final ready-to-use software</li></ul>
<b>Certifications (MOOCs)</b>	<b>Data Science Professional Certificate   IBM</b> (9 courses) <ul style="list-style-type: none"><li>· Databases and SQL, Python for data analysis, data visualization, and AI</li></ul> <b>Machine Learning   Stanford University</b> <ul style="list-style-type: none"><li>· Neural Networks, dimensionality reduction, anomaly detection, recommender syst.</li></ul> <b>Business and Financial Modeling Specialization   Wharton, UPenn</b> (5 courses) <ul style="list-style-type: none"><li>· Quantitative modeling, modeling risk and realities, model-based decision making</li></ul> <b>ML &amp; Reinforcement Learning in Finance   NYU Tandon</b> (4 courses) <ul style="list-style-type: none"><li>· Algorithmic trading, Markov Decision Process models, Cryptocurrencies</li></ul> <b>Data Analytics in Finance   U. of Illinois at Urbana-Champaign</b>
<b>Competitions</b>	<b>2019 Harvard/MIT Business Case Competition</b> <ul style="list-style-type: none"><li>· Created a strategic business plan for a real client (bioprinting firm)</li><li>· Held roles in market data analysis, projected market sizing, and business model definition</li></ul>

## LEADERSHIP EXPERIENCE

---

<b>NGO Kutembea Na Tanzania</b> <i>International Volunteer</i>	Aug. 2018 - Sept. 2018 <i>Arusha, Tanzania</i>
<ul style="list-style-type: none"><li>· Led an intercultural team of five to build a school for local children</li><li>· Designed a renewable energy-based electrical system for the school</li></ul>	

## SKILLS

---

<b>Programming</b>	<b>Python</b> (Proficient), <b>MatLab</b> (Proficient), <b>Julia</b> (Advanced), <b>R</b> (Advanced), <b>HTML</b> (Advanced)
<b>Machine learning</b>	TensorFlow, Keras, PyTorch, Sci-Kit, Google Cloud ML Engine
<b>Big data</b>	Apache Spark, Google Cloud Suite
<b>Databases</b>	SQL, MySQL
<b>Optimization</b>	Mixed Integer Programming, Convex Optimization, Linear Programming
<b>Data visualization</b>	Tableau, Plotly, D3.js
<b>Version control</b>	Git
<b>Academic writing</b>	LaTeX
<b>Languages</b>	<b>Spanish</b> (Native), <b>English</b> (Fluent), <b>German</b> (Advanced), <b>French</b> (Medium)