

Contact

www.linkedin.com/in/lidio
(LinkedIn)

Top Skills

Machine Learning
Predictive Modeling
Python

Languages

English (Full Professional)
Portuguese (Native or Bilingual)
Japanese (Limited Working)

Certifications

Probabilistic Deep Learning with
TensorFlow 2

Publications

1, 4-Thienodiazepine-2, 5-diones via
MCR (I): synthesis, virtual space and
p53-mdm2 activity
Discovery of modulators of protein-
protein interactions: current
approaches and limitations
Pre-existing soft modes of motion
uniquely defined by native contact
topology facilitate ligand binding to
proteins
ANCHOR: a web server and
database for analysis of protein-
protein interaction binding pockets
for drug discovery
ProDy: Protein dynamics inferred
from theory and experiments

Lidio Meireles, PhD, MS

Applying AI to enhance donor selection for organ and stem cell
transplants.
San Diego Metropolitan Area

Summary

Founder & CEO of Immunomatics, Inc., a health tech startup
developing AI models to enhance donor-recipient matching for
organ and stem cell transplants. Co-inventor of JOURNAVX, Vertex
Pharmaceuticals’ FDA-approved non-opioid medication for pain
treatment. Passion for developing data-driven solutions to complex
scientific problems, particularly in health care. Theoretical and
practical skills in a broad range of Computational Biology and
Machine Learning algorithms and tools.

Experience

Immunomatics, Inc.
Founder & CEO
March 2024 - Present (2 years 6 months)
San Diego Metropolitan Area

We are developing advanced AI models to enhance donor selection for organ
and stem cell transplants, aiming to improve patient outcomes and save lives.

FICO
Lead Analytic Scientist, Machine Learning Engineer
June 2019 - June 2023 (4 years 1 month)
Greater San Diego Area

Predictive modeling Anti-Money Laundering (AML):

- Time-series analysis of financial transactions for detection of money
laundering;
- Developed a new ML training methodology that reduced false-positives by
50%;

Vertex Pharmaceuticals
5 years
Senior Research Scientist, Computational Biology & Chemistry
2017 - 2019 (2 years)
Greater San Diego Area

Co-inventor of JOURNAVX (suzetrigine) – Vertex's FDA-approved non-opioid medication for pain treatment;

Development and application of computational methods and predictive modeling to accelerate drug discovery:

- Co-inventor in several patents related to modulators of sodium channels;
- Using visualization and matched-pair analysis, discovered insights that led to improved potency and properties of lead compounds;
- Developed a multi-parameter optimization algorithm for identifying compounds with a balance of good properties;

Research Scientist II, Computational Biology & Chemistry

2014 - 2017 (3 years)

Greater San Diego Area

Development and application of computational methods and predictive modeling to accelerate drug discovery:

- Correctly predicted the protein target of a phenotypic screen hit using similarity network analysis and visualization;
- Implemented optimization algorithm for designing experimental groups and successfully applied it to Vertex oncology portfolio; (Bertsimas et al. The power of optimization over randomization in designing experiments involving small samples. Operations Research, 2015);
- Implemented algorithm to generate binding site hypotheses from protein sequence and selectivity data;

Vertex Pharmaceuticals

Research Scientist I, Machine Learning Engineer

2011 - 2013 (2 years)

Greater Boston Area

Development of the Machine Learning infrastructure at Vertex

Pharmaceuticals:

- Developed machine learning software to automate weekly model training, validation and deployment to Vertex scientists; reduced model development timelines from days to a few hours;

Education

University of Pittsburgh

Doctor of Philosophy (Ph.D.), Computational Biology · (2006 - 2011)

Kyoto University (Japan)

Master's Degree, Computer Science, Bioinformatics · (2003 - 2006)

Universidade Federal de Sergipe (Brazil)

Bachelor's Degree, Computer Science · (1999 - 2003)