## MEHDI BOUASSAMI

mbouassa@ucsd.edu | linkedin.com/in/mehdi-bouassami | Quadrilingual: French, English, Spanish, Moroccan

#### **EDUCATION**

University of California San Diego | 2019 - 2023 | GPA: 3.90 | Credits: 158 | Graduation year: 2023

B.S. Data Science, Minors in Mathematics and Entrepreneurhsip/Innovation (3.9/4.0 GPA)

### RELEVANT COURSEWORK + SKILLS

Data Structures, Linear Algebra, Machine Learning, Systems for Scalable Analytics, Data Management (SQL), Probability and Statistics, Calculus, Probability and Statistics

**Programming Languages** 

Python, SQL, Java, Matlab,

Javascript, R, HTML, CSS, NoSQL

**Web/Mobile App Development** 

Django, Flask, React, React-Native,

Javascript, MongoDB

**Machine Learning / Data** 

Scikit-learn, TensorFlow, PyTorch, Keras, Matplotlib, BeautifulSoup, Postgres, Dask, Apache Spark,

NumPy, Scipy, Pandas, Seaborn

### WORK EXPERIENCE

# ${\bf Model\text{-}based\ targeted\ dimensionality\ reduction\ |\ Halicioglu\ Data\ Science\ Institute\ at\ UCSD\ |\ January\ 2021-ongoing}$

Individual Research Project mentored by Professor Mikio Aoi

- Utilized MTDR, which encompasses a combination of Regression and dimensionality reduction techniques to demix the effects of different task variables on the activity of neural populations
- Wrote code for Gaussian and Poisson MTDR, compared both methods and was able to identify computational subspaces. Concluded that Poisson MTDR better described large population of neurons
- Currently finishing writing a paper on my work and will present my work at the Society For Neuroscience in November 2022

# Theoretical investigation of a neural network model to understand the stability of information processing in the brain $\mid$ UCSD $\mid$ December 2020 – June 2021

Individual Research Project mentored by Professor Johnatan Aljadeff

- Started by computing the capacity of the perceptron model using machine learning. I then used pruning and saw how it affected the capacity of the model
- Concluded that capacity is reached faster with pruning
- Will write an academic paper with professor Aljadeff in April 2023

### Data Science Intern | Snipfeed | July 2021 – ongoing | Paris France

*Link in bio platform that turns creators into - Raised 6.4M\$ (Crunchbase)* 

- Worked in a team of four data scientists and analyzed/predicted user behavior using pandas, Scikitlearn (machine learning) and probabilistic machine learning
- Investigated monetization tools using data visualizations to find the most popular ones

#### **PROJECTS**

# $iPlan\ startup\ |\ React-Native,\ Flask,\ MongoDB,\ Javascript,\ Python\ |\ June\ 2022-Ongoing$

- Developed an App that uses Fuzzy Logic AI and ML to improve students' well-being by planning their study times automatically, tracking their sleep and physical activities
- The app will be used by the International School of Geneva starting in October and will be available on Expo

### Drug Age Project | Python | September – December 2020

• Used a decision tree classifier to see which of socioeconomic status or ethnicity is better predicted by the age at which an individual started using drugs