

# Miguel Garcia

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## EXPERIENCE

### COMSORT, INC, (DBA MEDIFIND) | DATA ENGINEER

Feb 2021 – Present | Hunt Valley, MD

- Supported operation tasks such as data refreshes, development of data process automation tools through Python, and with the creation and maintenance of data pullers/loaders.
- Assisted team members in troubleshooting development and production runs of the application by making use of AWS tools, Spark, Java, and ElasticSearch.
- Performed maintenance in the database when bugs arose and incorporated fixes into the pipeline process to maintain the integrity of the database.

### NGOGGLE DIAGNOSTICS, INC | DATA SCIENCE CONSULTANT

Dec 2019 – Jan 2021 | San Diego, CA

- Worked on a research project that involves developing effective neurofeedback systems that can help classify sleep stages using low-cost and non-invasive EEG electrodes.
- Implemented Convolutional Neural Network algorithms using Python and tensorflow to capture dependencies between sleep epochs and sleep scores in order to classify sleep stages using a single EEG channel.

### UCSD COGNITIVE SCIENCE DEPARTMENT | INSTRUCTIONAL

APPRENTICE

Sep 2019 – Dec 2019 | La Jolla, CA

- Assisted with the teaching of an upper division course in Data Science.
- Organized weekly discussions and office hour sections where students ask any data science related questions and get help on their projects.

### SWARTZ CENTER FOR COMPUTATIONAL NEUROSCIENCE

RESEARCH ASSISTANT

Jul 2019 – Nov-2019 | San Diego, CA

- Applied machine learning algorithms and models to assist with the detection of sleep stages on subjects diagnosed with RBD using Python.
- Provided analytics and visualizations on how the brain signals behave under certain sleep disorders (bruxism, nocturnal frontal lobe epilepsy, etc)

## PROJECTS

### GENERATIVE MODELS FOR IMAGE REPRODUCTION

PYTHON | TENSORFLOW | MACHINE LEARNING | DATA SCIENCE

- Analyzed the performance of different autoencoders and adversarial neural networks for reproducing image input using the CelebA dataset.
- Built the architecture for the neural networks and the autoencoders using PyTorch and wrote multiple pipelines to process the data.

### MEET TO DINE - SPONSOR WINNING PROJECT

HTML | CSS | NODE.JS | ALGORITHMS

- Sponsor winning project (OpenTable) where we designed a mobile app at Cal Hacks 4.0 (UC Berkeley) that facilitates groups of people agreeing upon eating at the best location possible.
- Developed a location tracking functionality, and implemented backend infrastructure by developing a restaurant selection algorithm. Created application in react native using expo.io.

## EDUCATION

### JOHNS HOPKINS UNIVERSITY

M.S. IN DATA SCIENCE

Expected Dec 2022 | Baltimore, MD

### UNIVERSITY OF CALIFORNIA, SAN DIEGO

B.S. IN COGNITIVE SCIENCE WITH A

SPECIALIZATION IN MACHINE LEARNING AND NEURAL COMPUTATION

March 2020 | San Diego, CA

## SKILLS

### PROGRAMMING

- Python • Java • C/C++
- HTML • CSS • JavaScript
- Node.js • SQL • R
- Spark • Scala • ElasticSearch

### TECHNOLOGY

- MongoDB • MySQL
- Git/Github • Linux
- UNIX • Bash • Zeppelin
- Airflow • AWS • Hadoop

## COURSEWORK

### GRADUATE

Algorithms for Data Science

Data Visualization

Data Structures

Discrete Mathematics

Database Systems

Statistical Models and Regression

### UNDERGRADUATE

Machine Learning I and II

Adv. Machine Learning Methods

Brain Computer Interfaces

Data Science in Practice

Multivariable Calculus

Programming in Java I and II

Programming in C

Software Tools and Techniques

Probability Theory

Linear Algebra

Vector Calculus

## LINKS

LinkedIn: [miguelgd54](#)

Github: [miguelgd54](#)

Personal Website:

<https://miguelgarciad.com>