

Miguel Garcia

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EXPERIENCE

NGOGGLE DIAGNOSTICS | CONSULTANT (DATA SCIENTIST)

Nov 2019 – Present | San Diego, CA

- Working on a research project (NIH) that involves developing effective neurofeedback systems that can help classify sleep stages using low-cost and non-invasive EEG electrodes.
- Identified key performance indicators that are important towards improving sleep quality and for calculating the sleep onset of patients by doing exploratory analysis of the collected/available data.
- Improved data accuracy, viability and value by collecting/mining, cleansing, organizing, and providing useful modeling and thorough statistical analyses.
- Documented and communicated the research processes, algorithms, and analytics with business and technical staff.
- Engineered and developed scripts and algorithms in both MATLAB and Python to automate the processing and analysis of the data.

UCSD COGNITIVE SCIENCE DEPARTMENT | DATA SCIENCE

INSTRUCTIONAL APPRENTICE

Sep 2019 – Dec 2019 | La Jolla, CA | COGS 108

- Assisted with the teaching of an upper division course in Data Science
- Organized weekly discussion and office hour sections where students ask any data science related questions and get help on their projects.
- Attended weekly meetings with all the staff to come up with more resources for the class.

SWARTZ CENTER FOR COMPUTATIONAL NEUROSCIENCE

RESEARCH ASSISTANT VOLUNTEER (DATA SCIENCE)

Jul 2019 – Nov-2019 | San Diego, CA

- Assisted in scientific research on REM behavior disorder.
- Implemented machine learning algorithms and models to assist with the detection of sleep stages on subjects diagnosed with RBD.
- Some of the projects involved processing data that got collected from patients that had different sleep disorders to provide analytics and visualizations on how the brain signals behave under these conditions.

PROJECTS

GENERATIVE MODELS FOR IMAGE REPRODUCTION

PYTHON | TENSORFLOW | MACHINE LEARNING | DATA SCIENCE

- Analyzed the performance of different autoencoders and adversarial neural networks when it comes to reproducing image input using the CelebA dataset.
- Built the architecture for the neural networks and the autoencoders using PyTorch and wrote multiple pipelines to pre-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.
- Integrated a database, 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 | PART-TIME, ONLINE
Expected Dec 2021 | 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

TECHNOLOGY

- MongoDB • MySQL
- Git/Github • Linux
- UNIX • Bash

STUDIES

MASTERS

Discrete Mathematics
Data Structures
Algorithms for Data Science
Statistical Methods and Data Analysis
Data Visualization

UNDERGRADUATE

Machine Learning I and II
Adv. Machine Learning Methods
Brain Computer Interfaces
Data Science in Practice
Programming in Java I and II
Programming in C
Software Tools and Techniques
Systems Programming
Algorithms
Data Structures
Discrete Mathematics
Probability Theory
Graph Theory
Linear Algebra
Vector Calculus

LINKS

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