Andres M Menendez

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School and Degrees

Georgia Institute of Technology

Online Masters In Computer Science Candidate | fall 2022 | GPA: 3.90
- Specialization in Machine Learning

Bachelor of Science in Mechanical Engineering | spring 2018 | GPA: 3.13
- Minor in Energy

Professional Experiences

WithHansa Startup Front End Lead Developer | summer 2022 - current

Founded, designed, created and developed the entire Front End framework for WithHansa
Developed hooks, API endpoints, and built connections to third party applications.
Maintained, organized, and refactored codebase and documentation to be scalable and readable.

Branch.vote Startup Front End Developer | spring 2021 - fall 2021

Volunteered work to help develop React.js components for Branch.vote website
Implemented an AWS Lambda hook to split audio at provided time markers and save to AWS S3 bucket

PIC Group CAD Developer | summer 2018 - spring 2019

Created and completed full power plant system P&IDs via AUTOCAD from field drawings
Verified and reviewed power plant system maps for quality assurance

Cupertino Electric Internship | summer 2017

Automated processes to minimize run-time and human error via excel VBA macros
Improved Power-Grid P&ID take-off process via kNN Image Reading Python AI Tool

Project Experiences

AICrowd Multi-Agent Behavior Challenge | fall 2021

Built and upgraded supervised/unsupervised neural nets with PyTorch to predict behavioral classifications
Designed and implemented loss-modules to deal with class imbalances
Trained, tested, cross-validated and presented multiple supervised and unsupervised model performances
Scored in the top 25 performances of the MABe Challenge [2]

Reinforcement Learning Explorations | spring 2021

Modeled and trained a DQN to solve the OpenAI Lunar Lander via TensorFlow
Tested, monitored and optimized power performance of active sub-systems
Created and programed control systems for lighting and circulation pumps

Hydroponics Startup Electrical Systems Engineer | spring 2018

Designed entire 200 W electrical system to run pumps, lights and indicators
Tested, monitored and optimized power performance of active sub-systems
Created and programed control systems for lighting and circulation pumps

Research Energy Modeling at Georgia Tech (STEEL) | spring 2016 - spring 2018

Designed, programmed and tested theoretical models and simulations via MATLAB
Modeled a cross-variable parametric analysis to optimize system variables
Acknowledged in a published academic paper under the Journal of Power Sources[1]

Engineering Portfolio

Website Portfolio | https://www.andmenendez.com
Github | https://github.com/andmenendez

Technical and Soft Skills

technical | Python, C#, Javascript, ReST API, HTML, CSS, Git, SQL, AWS S3 and Lambda, Java, Ruby, MATLAB, HCI, LCOE
libraries | PyTorch, Tensorflow, Matplotlib, Numpy, Pandas, SQL, React, Django, Flask, Jupyter Notebooks, Next.js, ReactQuery, Redux
software | Heroku, Jira, pgAdmin, CAD (Solidworks, UG-NX, Autodesk), FEA (ANSYS), Unity, Blender
other | climbing, alpinism, sailing, writing, philosophy, music production, bilingual (Spanish), barista

[1] Alexander Limia, et al, "A dual-stage sodium thermal electrochemical converter (Na-TEC)", Journal of Power Sources 371 (2017) 217-224

[2] https://www.aicrowd.com/challenges/multi-agent-behavior-representation-modeling-measurement-and-applications/problems/mabe-task-1-classical-classification/submissions/167477