DINA DEHAINI

✉ dsdehain@ucsd.edu 📞 8587055502 in linkedin.com/in/dinadehaini 🔗 dinadehaini

SUMMARY

I am a student at UC San Diego finishing a Bachelor's degree in Cognitive Science with a specialization in Machine Learning and Neural Computation and a minor in Computer Science and Engineering and now pursuing a Master's in Computer Science and Engineering. My professional interests lie in Artificial Intelligence and Machine Learning fields specifically computer vision and natural language processing.

EDUCATION

University of California, San Diego   Oct. 2022 - Current
M.S. Computer Science and Engineering

University of California, San Diego   Oct. 2020 - Current
B.S. Cognitive Science Spec. Machine Learning and Neural Computation
Minor in Computer Science
Current GPA - 3.97

EXPERIENCE

Existential Robotics, *Undergraduate Researcher*   Oct. 2021 - Current
Developing depth estimation and semantic segmentation for terrain mapping in a wildland/forest environment with the eventual goal of fire detection and optimizing a mesh model of the environment using a graph neural network and RGB observations with semi-supervised learning, transfer learning, and domain adaptation

IntelligenceX, *Machine Learning Intern*   Sep. 2021 - Current
Implementing computer vision and NLP solutions for IntelligenceX platform, updating IoT platform with Azure and AWS sentiment analysis and object detection

LPL Financial, *Machine Learning Intern*   Jun. 2021 - Aug. 2021
Development of ECMD Help Center building a semantic search, providing recommended searches, autocomplete and ranking using Apache Solr and REST API

iRobot, *Machine Learning and Data Annotation Intern*   Jun. 2021 - Dec. 2021
Performed data annotation tasks for robot docking behavior and spatial mapping to allow robots to gain semantic understanding and for spatial mapping purposes

Center for Engineered Natural Intelligence, *Undergraduate Researcher*   Dec. 2020 - Jun. 2021
Assisted Professor Henry Abarbanel at UCSD in his machine learning & neurobiology research, through Spring 2021, modeling biological neural networks, large and small, with reservoir machine learning networks at the Marine Physical Laboratory. Presented our findings at the 2021 UCSD Undergraduate Research Conference (URC).

PROJECTS

Semi-Supervised RGB-Thermal Semantic Segmentation for Aerial Images   Oct. 2021 - Current
Semantic segmentation via a mesh model that fuses and enhances predictions from two data sources, RGB and thermal images, and produces pseudo labels in order to perform cross pseudo supervised semi-supervised learning and encourage similar predictions (paper coming soon)

Semantic Search and Recommendation   Jun. 2021 - Aug. 2021
Built and deployed semantic search project with people also ask function for financial advisors at LPL Financial to reduce calls to the help center using AEM, Solr and Machine Learning services.

Reservoir Computing Neural Network Model   Dec. 2020 - Jun. 2021
Used a Reservoir Computer (a type of low-cost recurrent neural network) to replicate the output a small group of brain neurons given various stimuli. Trained Reservoir Computers on simulated neuron output data from an updated Hodgkin-Huxley model to a great deal. Wrote paper detailing our findings, submitted to the FMP, and reviewed by Prof. Abarbanel.

Benign/Malignant Tumor Prediction   Mar. 2021 - Jun. 2021
Developed PCA, K-means, and Gaussian mixture model algorithms from scratch to predict benign vs malignant breast cancer tumors with the Wisconsin breast cancer diagnostic dataset and compared the accuracy of both models on raw data and PCA data. Modeled results.

SKILLS

TECHNICAL: C++, Java, Python, Node.js, Javascript, Operating Systems: Windows, Linux, Machine learning, Jupyter, advanced data structures and algorithms,
ML Libraries: Numpy, Pandas, Keras, Tensorflow, Numpy, SciKit, Pytorch, OpenCV, Scikit-learn, Neural Networks, Computer Vision, Deep Learning, Natural Language Processing, AWS, Azure, computer vision, Flask, Bash script, Transfer learning, CNN, LSTM, RNN, Kubernetes, Git, Postman
LEADERSHIP/TEAM PLAYER: Collaborated to put on events and fundraisers hosted by AWIS and MCS, Spearheaded supply drives and oversaw FRC robotics team

ACTIVITIES

Association for Women in Science -*Outreach Committee Member*   Oct. 2018 - Current
Engaged in the organization and volunteering of events put on by Association for Women in Science San Diego chapter
Board member for 2021 Women in Science and Technology symposium

Women In Computing - *Member*   Jan. 2021 - Current
Women in Computing member and EDGE committee member where we mentor high school girls interested in pursuing a career in STEM

Association for Computing Machinery AI/ML - *Member*   Oct. 2020 - Jun. 2021
Association for Computing Machinery Artificial Intelligence/Machine Learning club member at UCSD