Sean Mobilia

Machine Learning Engineer | Data Scientist
Cupertino, CA
-Email me on Indeed: http://www.indeed.com/r/Sean-Mobilia/f92f77ada8f08a6a

Machine Learning Engineer | Data Scientist with 2+ years experience developing deep-learning models for image processing and NLP applications.

Awarded Best of Show at the 2019 SJSU Tech Symposium for work on my Master's Thesis.

Authored "Classification of Hyperspectral Colon Cancer Images Using Convolutional Neural Networks" and presented results at the IEEE DSW'19 Conference, which discussed using deep learning models developed in Python and Tensorflow to classify advanced colon tissue imagery.

Technical Skills:

Tools: Python, MATLAB, SQL, Git, R.

Packages: TensorFlow, Keras, PyTorch, SciKit-Learn, Pandas, Numpy, SciPy, Matplotlib.

Machine Learning: Deep-Learning, CNN, Image Processing, Statistical Analysis, Data Visualization, Regularization, K-Nearest Neighbor, Regression, Classification.

Willing to relocate: Anywhere
Authorized to work in the US for any employer

Work Experience

Machine Learning Engineer | Data Scientist

Self
July 2019 to Present

Implemented CNN image processing classifier project using PyTorch. Further developed machine learning and data science skills through short courses on PyTorch and NLP.

Machine Learning Engineer | Data Scientist | Melanoma Classification Project

Self
July 2020 to August 2020

Developed CNN classifier using Python and PyTorch in order to distinguish between cancerous and noncancerous skin lesions. Implemented an end-to-end pipeline to process and augment images, build the neural network, and analyze the model predictions.

Investigated skewed image dataset that only contained 1.7% malignant images.

Implemented transfer learning pipeline to improve classifier performance.

Machine Learning Engineer | Data Scientist | Master's Thesis

San Jose State University
2018 to 2019

"Classification of Hyperspectral Colon Cancer Images Using Convolutional Neural Networks."

Designed machine learning algorithms using Python and Tensorflow for the purpose of distinguishing between cancerous and normal tissue samples. Created an end-to-end pipeline to process hyperspectral images, develop the neural network model, and analyze the model predictions.

- Created a Leave One Patient Out model to properly test and evaluate challenging dataset.
- Documented and presented results at the 2019 SJSU Tech Symposium and IEEE DSW 19 Conference.
- Awarded Best of Show at the 2019 SJSU Tech Symposium.

Consultant

Global Enterprise Initiative (GEI)
2009 to 2016

Provided business development support to companies working to develop global technology projects. Quickly learned to code in Wordpress and HTML to develop company web presence. Coordinated between representatives from multiple international companies to deliver project proposals.

Education

Master's in Electrical Engineering

San Jose State University - San Jose, CA
May 2019

Skills

- Deep learning (2 years)
- Machine learning (2 years)
- Neural networks (2 years)
- Python (2 years)
- Tensorflow (2 years)
- Matlab
- SQL (Less than 1 year)
- Pandas (2 years)
- Numpy (2 years)
- Scipy (2 years)
- Artificial Intelligence (2 years)
- Data Science
- Analytics
- PyTorch (Less than 1 year)
- NLP (Less than 1 year)

- R (Less than 1 year)
- C/C++ (Less than 1 year)
- GitHub
- Regression Analysis
- Git
- Data Visualization
- Data modeling
- Natural language processing
- MySQL

Languages

- English - Expert

Links

https://github.com/smobilia/

Certifications and Licenses

NLP with Python for Machine Learning Essential Training - LinkedIn

June 2020 to Present

Learned to develop an NLP pipeline, covering preprocessing, classification, and analysis. Stemming, lemmatizing, tokenization, grid searches, and other methods were shown in context with NLP applications.

Assessments

Problem Solving — Expert

December 2019

Measures a candidate's ability to analyze relevant information when solving problems
Full results: Expert

Project Timeline Management — Highly Proficient

October 2020

Prioritizing and allocating time to effectively achieve project deliverables
Full results: Highly Proficient

Analyzing Data — Highly Proficient

October 2020

Interpreting and producing graphs, identifying trends, and drawing justifiable conclusions from data.
Full results: Highly Proficient

Indeed Assessments provides skills tests that are not indicative of a license or certification, or continued development in any professional field.

Publications

Classification of Hyperspectral Colon Cancer Images Using Convolutional Neural Networks

https://ieeexplore.ieee.org/document/8755582

June 2019