

Craig Tyler Celestin

Machine Learning Engineer

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TECHNICAL SKILLS

Machine Learning | Python, PyTorch, TensorFlow, Scikit-learn, Keras

Data Analysis | Pandas, Matplotlib, NumPy, Torchvision, PIL, Logistic Regression

Development | Git, Docker, CI/CD

WORK EXPERIENCE

Intern Software Engineer | Atlantic Automation (Houston TX) | gitlab.com/crgcelestin/atlanticautomation

- Designed, built, tested, and deployed Python scripts that automated financial report creation, led to a reduction in time spent on report generation by 90%
- Successfully created an analytics dashboard within a 2-week sprint, streamlining data analysis by 95% and facilitating data-driven decision-making processes

Business Analyst | COI Energy (Brooklyn NY)

- Analyzed web and mobile interfaces for the Digital Energy Management Application using A/B testing and usability studies resulting in a 25% increase in daily active users and a 20% increase in session duration
- Provided critical insights on bugs, optimization, and potential new features with the use of client dev tools and run time analysis (improved runtime by 80%)
- Modeled an average of 50 Energy Data and Demand Response trends per quarter using matplotlib

AI/ML PROJECTS

Artificial Intelligence Engineer | gitlab.com/crgcelestin/digits-classifier

HandWritten Digit Classifier | Perceptrons, Gradient Descent, Logistic Regression, Pytorch

Designed and Trained Handwritten digits classifier using Pytorch and the MNIST Dataset

- Successfully performed data extraction using torchvision and DataLoader in order to perform normalization and flattening
- Executed on data exploration and manipulation using matplotlib, numpy, and torch to produce visualizations of data and labels
- Accomplished the architecturing and testing of network using torch and the SGD Optimizer after hyperparameter adjustment resulting in a 98% accuracy of digit classification

Artificial Intelligence Engineer | gitlab.com/crgcelestin/Bike-Sharing-Demand

Bike Sharing Demand Prediction Model | Model Training, EDA, AutoGloun Framework, SageMaker Studio

Built and trained an AI Model to predict Kaggle Bike Demand using the Autogloun model library

- Accomplished data preparation with feature addition using deserialization and type categorization
- Executed on analysis and parametrization using pandas and bokeh in order to mitigate loss and increase accuracy in testing and validation processes
- Successfully fine tuned the the model using hyperparameters and categories for a 62% accuracy increase from first training session to the final submission which had a 90% accuracy

Machine Learning Engineer | gitlab.com/crgcelestin/flower-classifier

Flower Classifier | Python, Numpy (PyTorch), HTML, Torchvision, PIL

Built and trained a custom image classifier that utilized PyTorch and VGG16 architecture

- Successfully utilized torchvision models in order to load data and partition the provided dataset for training, validation, and testing processes to ensure optimal model accuracy
- Executed on successfully building a fine tuned flower classifier using the VGG16 model architecture and was able to develop a feed-forward classifier with loaded input
- Trained and tested a VGG16-based neural network on a 102 Category Flower Dataset and predicted new images with trained model that had a 88% accuracy over 20 epochs

EDUCATION

Hack Reactor | Full Stack Software Engineering Immersive with Python and JavaScript Certificate

Udacity Nano-Degree Program | AI Programming with Python Certificate

Binghamton University | Bachelor of Science: Chemistry

Feb 2023

Jan 2023

Aug 2022