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Linh Hoang

Engineer

HIGHLIGHT

Have 2+ years of experience in AI Engineer and 1 year in Embedded System position

- Have 2+ years of experience in Data Science and AI/Machine Learning.
- Have 1+ years of experience in IOT System.
- Experienced in AI Agent.

TECHNICAL SKILLS

Programming Skills:

- Python programming: OOP, Flask.
- C Programming: OOP, RTOS (Real-Time Operating Systems for Microcontrollers).
- MATLAB: Image Processing.
- Web Design: HTML5, CSS.

Continuous Integration:

- Virtual development environments: Docker.
- DevOps: Kubernetes clusters, Helm.

Database and Big data:

- RDBMS: SQL Server, MySQL, PostgreSQL.
- Graph Database Platform: Neo4j.

AI/Machine Learning Techniques:

- Supervised and unsupervised learning algorithms (Regression, Clustering, Classification, …etc).
- Transfer Learning.
- Time series forcasting techniques: ARIMA, SAMIRA, LSTM, GRU,Prophet, Seasonal decomposition, Exponential Smoothing, TFT and Lag Solution.
- Computer vision: Object detection and Object classification.
- Natural Language Processing: Word2vec and doc2vec, Word Embedding, Skip-Gram Embeddings, BERT, XLNet, PhoBert for Vietnamese, Attention and Transformer, Sentiment Analysis /Aspect-Based Sentiment Analysis (MGAN, AOA, TNet, CABASC, RAM, MemNet, IAN,ATAE-LSTM, TD-LSTM), NER.

- OCR: Image Processing with OpenCV, Yolo, Google Vision
- Relation Extraction: OpenNRE.
- Reinforcement Learning: Rainbow.
- Frameworks/Libraries: Tensorflow, Pytorch, Theano, Keras, OpenCV, Sklearn, Pandas, Matplotlib.

Cloud computing and Services:

- Amazon Web Services: EC2, S3, Redshift, AMQ
- Google Cloud Engine: Google Vision
- Microsoft Azure: Kubernetes Services, SQL Databases, Storage Accounts, Container Registries, RabbitMQ

Projects:

- Contact: Slack, Skype, Team, Microsoft Teams, Phone, Email
- Working Process: Trello
- Source Control: SVN, Github, Gitlab

RELEVANT PROJECTS

DEMAND FORECASTING

AI ENGINEER

The Demand Forecasting is the process in which historical sales data combined with promotion and special event are used to develop an AI solution of an expected forecast of customer demand for old or new product in the future.

Duties

- Connect and collect data from SQL server.
- Data analysis for better feature selection
- Deploy model to Azure with k8s.
- Analyzing the effect of promotion and holidays/ special events to demand
- Research and build time series model.

Technologies

- Programming languages: Python
- Solution: ARIMA, SARIMA, LSTM, GRU, Prophet, Seasonal decomposition, Exponential Smoothing, TFT and Lag Solution.
- Database: SQL Server.
- DevOps: Kubernetes clusters, Helm.

CALL CENTER ANALYSIS

AI ENGINEER

Analyze the call audio records from call center for mining useful data, includes feedback and booking information

Duties	Technologies
• Research supervised learning text classification algorithms. • Crawl data and label sentences. • Implement some algorithms and custom them to get aspect in sentence. • Sentiment analysis/ Aspect sentiment analysis by using BERT architecture. • Optimize model with multi-domain data.	• Python programming. • Frameworks: Keras, Pytorch, Tensorflow. • Embedding: Word2vec, Word Embedding. • Solutions: MGAN, AOA, TNet, CABASC, RAM MemNet, IAN, ATAE-LSTM, TD-LSTM, BERT.

RELATION EXTRACTION

AI ENGINEER

Suppose there are keywords (Entities) in the text (A, B , C, D,..). These keywords may appear multiple times in the document. Some of these keywords (Entities) are related to each other using some relationships (Action words/Verbs). The goal of project is to implement AI solution to predict relationship between any 2 entities.

Duties	Technologies
• Research supervised learning text classification algorithms. • Crawl data and label sentences. • Using tool box/ building Deep learning model to get relationships. • Building graph data.	• Python programming. • Frameworks: Keras, Pytorch, Tensorflow. • Embedding: Word2vec, Word Embeddi • Solutions: Deep Learning, OpenNRE. • Graph Database: Neo4j.

TDOS ATTACK DETECTION

AI ENGINEER

Computer vision tool for detection, mapping, and fault classification of photovoltaics modules in aerial IR videos.

Duties	Technologies

- Research supervised learning classification algorithms.
- Feature engineering
- Building AI model.
- Deploying model to AWS.

- Python programming.
- Frameworks: Keras, Pytorch, Tensorflow.
- Solution: SVM, KMean, Deep Learning.
- Amazon Web Services: EC2, S3, Redshift AMQ.
- Training model with multiple GPUs in AW

NER TASK

AI ENGINEER

Named-entity recognition (NER) is a sub-task of information extraction that seeks to locate and classify named entities in text into pre-defined categories such as the names of persons, organizations, locations, expressions of times, quantities, monetary values, percentages, etc.

Duties

- Research natural language processing algorithms.
- Crawl data and label sentences.
- Using tool box/ building Deep learning model to get relationships.
- Building graph data.
- Deploying model to Neo4j.

Technologies

- Python programming.
- Frameworks: Keras, Pytorch, Tensorflow.
- Embedding: Word2vec, Word Embedding
- Amazon Web Services: EC2, S3, Redshift, AMQ.
- Solutions: Bert.
- Graph Database: Neo4j.

RELATION EXTRACTION

AI ENGINEER

Suppose there are keywords (Entities) in the text (A, B , C, D,..). These keywords may appear multiple times in the document. Some of these keywords (Entities) are related to each other using some relationships (Action words/Verbs). The goal of project is to implement AI solution to predict relationship between any 2 entities.

Duties

Technologies

- Research supervised learning text classification algorithms.
- Crawl data and label sentences.
- Using tool box/ building Deep learning model to get relationships.
- Building graph data.

- Python programming.
- Frameworks: Keras, Pytorch, Tensorflow.
- Embedding: Word2vec, Word Embedding.
- Solutions: Deep Learning, OpenNRE.
- Graph Database: Neo4j.

TDOS ATTACK DETECTION

AI ENGINEER

Telephony Denial of Service (TDoS) attacks can overwhelm critical telephone systems, such as emergency response numbers or call centers. The goal of project to implement AI solution to detect of TDoS attacks, fraud attacks and unwanted robocalls. Once detected, calls can be blocked or diverted.

Duties

- Research supervised learning classification algorithms.
- Feature engineering
- Building AI model.
- Deploying model to AWS.

Technologies

- Python programming.
- Frameworks: Keras, Pytorch, Tensorflow.
- Solution: SVM, KMean, Deep Learning.
- Amazon Web Services: EC2, S3, Redshift, AMQ.
- Training model with multiple GPUs in AWS.

EDUCATION

DA NANG UNIVERSITY OF SCIENCE AND TECHNOLOGY

Da Nang City, Vietnam

Engineer degree