Arandos | Sr. Artificial Intelligence Engineer

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Summary

- Experienced senior Artificial Intelligence engineer with a decade of proficiency in developing and implementing advanced AI solutions.
- Extensive knowledge and expertise in machine learning, deep learning, natural language processing, computer vision, and data analytics technologies.
- Strong programming skills in Python, R, SAS, SQL, C/C++, HTML, Java, JavaScript, OpenGL, PHP, Visual Studio, and MATLAB.
- Skilled in managing cross-functional teams to deliver high-quality results within tight deadlines.

Technical Skills

- Platform: Windows, UNIX, Mac OSX, LINUX, ERP, SOA
- Programming Languages: Python, R, SAS, SQL, C/C++, HTML, Java, JavaScript, Visual Studio, MATLAB, OpenGL, PHP
- Libraries: OpenCV, Pandas, NumPy, Sci kit Learn, Beautiful Soup, Image, Matplotlib, ITK, VTK
- Databases: AWS, HADOOP(HDFS), NoSQL, SAP HANA, IBM DB2, Oracle, MS Access, MS SQL, PIG, HVE, SPARK SQL, GCP, MICROSOFT AZURE, LIDC, DICOM
- Machine Learning Algorithms: Linear regression, Logistic regression, Decision tree, SVM algorithm, KNN algorithm, K-means, Random forest algorithm, Naive Bayes
- Version Control: VSS, Harvest, TFS-2012

Professional Experience

BHuman.ai | Artificial Intelligence Engineer | June 2020 – Mar 2023 | New York, United States

- Developed and implemented Wav2Lip model for lip sync correction, increasing accuracy from 56% to 99.98%.

- Reduced time and energy requirements for animation producers by automating lip syncing for animated characters.
- Adapted Sync Net model to input a Mel-spectrogram representation of an audio segment alongside ground truth frames and a random reference segment whose speaker confirms to that of the ground truth segment.
- Trained on GCP and implemented on AWS.
- Used pretrained “expert” lip-sync detector to distinguish between reconstructed frames and ground truth frames.
- Deployed facial recognition software using Python3.9, Django, Flask, Cython, AWS, TrainML, GCloud Functions, GCloud Run, GCP, Linux, Windows, Rust, and Go.

Icertis | Computer Vision Engineer | June 2018 – Mar 2020 | Bellevue, United States

- Designed, developed, and implemented computer vision algorithms for unique use cases using deep learning frameworks including Tensorflow, Keras, PyTorch, and Caffe.
- Developed and documented Standard Operating Procedures of Prostate Px and Prostate Px Plus to comply with FDA requirements.
- Trained neural nets to solve problems such as human pose estimation, object detection, and face recognition.
- Preprocessed image dataset using OpenCV, scikit-image, etc.
- Designed custom convolutional neural network backbones such as VGG16, Resnet, and MobileNet.
- Implemented focus point localization algorithm to improve autofocus capabilities on brain tissue.
- Deployed software using Flask and used evaluation metrics like mAP, f1-score.

Fundbox | Machine Learning Developer | Jan 2015 – May 2018 | San Francisco, United States

- Designed and implemented algorithms using deep learning (CNN) to detect hazmat placards and bolt seals on cargo containers.
- Implemented CNN + SVM anomaly detector and door direction determining algorithm to make company the leader in performance for this service in the industry.
- Provided solutions to increase OCR accuracy of cargo container identifier to meet client requirements and product specifications.

- Developed in Python and C++ using the Caffe framework and NVIDIA DIGITS.
- Designed and implemented a C++ computer vision library that is being used in all product lines.
- Deployed software using Python3.7, Django, Flask, PyQt, PyInstaller, Shell, Kaggle, AWS, GCP, Linux, Windows, Matlab, and GPU.

Education

- Bachelor of Computer Science, The University of Tokyo, 2011