RONAK DEDHIYA

Machine Learning Engineer

@ dedhiyaronak@gmail.com   ● Mumbai, India   in linkedin.com/in/ronak-dedhiya   ○ github.com/ronakdedhiya

EXPERIENCE

Machine Learning Engineer

AitoeLabs (AiSight Video Analytics Pvt. Ltd.)

📅 June 2018 – Present   📍 Mumbai,India

- Research and development of Computer Vision algorithms centered around the video surveillance domain in collaboration with NCETIS, IIT Bombay.
- Working with team on design, development and integration of real-time video analytic solution.
- Leading the team on the training and evaluation of Deep Neural Network models.
- Experience with performance analysis, optimizations and benchmark evaluations.

Software Engineer

Atos India Pvt. Ltd.

📅 Feb 2017 – June 2018   📍 Pune,India

- Developed multiple Proofs-of-Concepts in order to build Machine Learning capabilities in the team.
- Incorporated various Machine Learning features in Atos's internal tools, in order to utilize the performance gain offered by Machine Learning algorithms.
- Deploying machine learning solution on cloud.

ACHIEVEMENTS

- Placed in top 14% in RSNA Pneumonia Detection Kaggle challenge
- Placed in top 3% in Digit Recognition Challenge using One-Shot Learning
- Winner at Samsung SMS Classification Hackathon
- Placed in top 5% in "Predict the Happiness" Hackerearth Challenge
- Secured AIR 1232 in GATE 2017

SKILLS

**C++, Python, Keras, Unix
Tensorflow, Pytorch, Darknet**   ●●●●●
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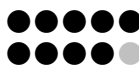
EDUCATION / COURSES

Deep Learning Specialization

Coursera

📅 June 2017 – Aug 2017

Bachelor of Technology

Vivekanand Education Society Institute of Technology

📅 June 2012 – May 2016

HONORS & AWARDS

- Received accolades at Atos for Best Performance in team.
- Received Best Debut Award at Atos.
- Won 2nd Consolation Prize for paper presented on Cognitive Radio Networks.
- Awarded with Narotam Sekhsaria Foundation Scholarship

PROJECTS

Masked Face Detection for ATM

- Developed a head classifier to detect masked faces in ATM to potentially prevent the event of robbery.
- Different camera angle, position, image quality, illumination and type of occlusion were the major challenges. Improved the existing accuracy by 20%.

Person Tracking

- Developed, modified and implemented robust object tracker by combining motion and appearance information to learn deep association metrics.

One Shot Learning

- One shot learning is the promising approach to learn good feature when little data is available.
- Achieved 92% accuracy on omniglot dataset using Siamese network with Bayesian optimization.

Automatic Defect Inspection of solar farm using drones

- Regular inspection of solar farm due to its wide size is strenuous.
- Developed a model to classify and localize defect on thermal images captured by drones.

Anomaly detection using Auto-Encoders

- Developed a model to learn regular patterns from sensor data and detect unusual pattern.

Early Warning Fault Detection and Identification

- Developed an LSTM based model to forecast and detect outlier from sensor data.
- Further, classified the given signal into one of the type of outlier.

Sentiment Analysis

- Used bag-of-words, pre-trained Embedding and simple as well as bi-directional LSTM techniques for Sentiment Analysis.