








Sailesh GANESHAN

Senior Engineer - Data Science

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 Bengaluru, IN

Developer with 8.5 years of overall experience, more than 3.5 years in Data Science, Machine Learning and Deep Learning. Has ample exposure to multiple of data science problems, good understanding of EDA approaches.




Ability to work in fast-paced environments with clear deliverables and timelines, self-driven and Agile ready. Presently, part of Cognizant's Accelerator for Products.

Bibliophile, Self-learner, Kaggler.

COMPETENCIES

Programming	Python, R (Basics)
Frameworks	Keras, Tensorflow, PyTorch (Basics), SpaCy, Rasa
Tools & Platforms	Git, Docker, Amazon SageMaker, Azure ML
Operating Systems	Windows, Debian Linux
Cloud	AWS

PROFESSIONAL EXPERIENCE

Present November 2016	Senior Engineer-2, COGNIZANT, Bengaluru, IN <ul style="list-style-type: none">Part of Machine Learning Group focused on developing reusable, generic solutions for the Cognizant Accelerator products.Formerly part of the Platform Engineering Group responsible for building a Deep Learning platform with focus on the modeling experience for Data ScientistsExplore, experiment and evaluate templatable use-cases using Keras & Tensorflow, that could be catered as a pipeline (<i>Build - Train - Local Predict - Deploy</i>)Lead for Chat Bot building pipeline development and channel integration based on Rasa Open Source frameworkEngage with stakeholders for Product Demos & interact with senior leadership in Feature Design discussions, Sprint Acceptance Demos & Product Roadmap discussionsResearch, followed by development of POCs to introduce newer ideas towards the larger goal <div>     </div>
September 2016 July 2015	Data Scientist, OXYENT MEDICAL/TECH, New Delhi, IN <ul style="list-style-type: none">Knowledge mining from historic traditional medicine data and insight generation through EDAData-driven hypothesis formulation, visualization and subsequent interpretation of data to validate the results with the corresponding interpretation based on Ayurvedic guidelinesPreliminary EDA of Cardiovascular patient reports (Anonymized) to identify various Risk FactorsCo-author of research publication <div>  </div>
April 2015 July 2014	Project Intern, PHILIPS INNOVATION CAMPUS, Bengaluru, IN <ul style="list-style-type: none">Predictive Modeling for inventory stock based sale predictionPOC on Sentiment Classification with continuous data enrichment & active learning from Twitter feed <div>  </div>
August 2012 September 2008	Senior Software Engineer, IBS SOFTWARE SERVICES, Thiruvananthapuram, IN <ul style="list-style-type: none">Involved in development & support of Airline booking platform for flysaa - South African Airways <div> </div>

“ PROJECTS

CONTENT BASED EMAIL CATEGORIZATION - POC

COGNIZANT (2020)

A proof of concept developed to automate the e-mail categorization based on content. The solution is built using SpaCy Text Categorizer at its core. The training data was sourced from multiple mailboxes within the organization, anonymized, curated and cleaned. The Text Categorizer is based on Conv1D based architecture. The trained model could be deployed as a module which would source the content from e-mails and categorize them appropriately. The classifier response would then be used to categorize the mailbox intelligently for the end user.

INTEGRATION OF AUTOMATED MACHINE LEARNING

COGNIZANT (2019)

An open-source framework known as **Autokeras** that is inspired by the meta-learning publication on Neural Architecture Search (NAS) was integrated into Cognizant's AI platform. The framework presently supports meta-learning for Image Classification problems.



INTEGRATION OF MODEL METRICS VISUALIZATION SERVICE

COGNIZANT (2018)

An open-source visualization service known as **VisualDL** was integrated into Cognizant's AI platform that would provide visualizations to monitor model training performance in real-time. It also enables support for visualizing intermediate image representation learned by ConvNet layers during the training. Enabled as a custom callback in Keras.

INSULATOR HEALTH CLASSIFIER USING CONVOLUTIONAL NEURAL NETS

COGNIZANT (2018)

A Convolutional Neural Network based Multi-class image classifier to detect the health of a given insulator. The model used insulator images as input that were labelled into multiple classes based on their condition. The trained model was exported as both *.hdf5* and *.pb* that could be served as a consumable REST Endpoint.

INTEGRATION OF RASA BASED CHATBOT FRAMEWORK

COGNIZANT (2017-18)

Rasa, an open-source framework was successfully integrated into the platform to enable chatbot building. The support extend from NLU based model training to Dialogue (Stories) based conversation learning. This served as the back-end framework which would empower the platform with bot building capabilities.



CONTEXT-AWARE Q&A CHATBOT USING MICROSOFT BOT FRAMEWORK WITH RASA

COGNIZANT (2017)



Proof of concept for a Q&A Bot build using Microsoft Bot Framework that would engage in a question-answer conversation with the user on a specific domain/topic of interest while preserving the context of conversation. RASA was substituted as the back-end NLU framework in place of Microsoft's LUIS.


























ACADEMICS

- 2015 Masters in Machine Learning & Computing, Indian Institute of Space Science & Technology, , Dept. of Space, Thiruvananthapuram | CGPA **7.96 / 10.0**
- 2008 Bachelors in Computer Science Engineering, P.A.Aziz College of Engineering & Technology, University of Kerala, Thiruvananthapuram | CGPA **6.76 / 10.0**

CERTIFICATIONS

- 2019  TensorFlow in Practice Specialization (Coursera)
- 2017  Neural Networks and Deep Learning (Coursera)
- 2017  Exam 475 : Designing and Implementing Big Data Analytics Solutions
- 2017  Exam 773 : Analyzing Big Data with Microsoft R
- 2017  Exam 774 : Perform Cloud Data Science with Azure Machine Learning
- 2016  Machine Learning by Andrew Ng (Coursera)

LANGUAGES

English					
Malayalam					
Tamil					
Hindi					
Kannada					

INTERESTS

- > Football
- > Strategy & Simulation Games
- > Violin
- > Non-fiction Titles
- > Photography