



Pawnesh Gautam

Date of birth: 19/03/1994

Nationality: Indian

CONTACT

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<https://github.com/gautampawnesh> (Github)

ABOUT ME

Masters student at TU Kaiserslautern with major in Machine learning & Data Science. Along with this, I have 4 years of expertise in software development and 1 year of experience as machine learning engineer.

EDUCATION AND TRAINING

31/03/2020 – 30/12/2022

Masters in Intelligent Systems and Visualization & Scientific Computing

Technical University of Kaiserslautern

31/07/2011 – 29/06/2015

Bachelor of Technology in Computer Science & Engineering

Dr. A.P.J. Abdul Kalam Technical University

Python & DataScience Tutor (Part-time)

MTA India

AWS Certified Solutions Architect - Associate(SAA-C01)

Amazon Web Services

WORK EXPERIENCE

01/10/2021 – 30/09/2022

Machine Learning Engineer (Part-time)

CARIAD Volkswagen

Responsibilities:

- Deploying ML systems into production using Azure Machine learning studio.
- MLOps workflow orchestration using Airflow for local ML pipeline.
- Semantic segmentation pipeline development based on OpenMMLab, Airflow & Azure ML.
- Optimisation over model output using morphological operations, class balancing, oversampling and network architecture changes.

Skills: Pytorch, OpenMMLab, Airflow, Optuna, Docker, Azure, Deep Learning, MLOps, Git.

20/11/2020 – 30/09/2021

Research Assistant (Part-time)

German Research Center for Artificial Intelligence

Project: Convolutional Neural network attention estimation for classification

Skills: Python, Pytorch, Deep Learning, Slurm

Responsibilities:

- Research & Implementation of new saliency method for CNN.
- Evaluation & Comparison with different attention matrices for CNN.

11/06/2018 – 19/02/2020

Software developer

IBM India Pvt Ltd

Project: AIOps: Multi-Cloud Management Platform

Technologies: Python, Pytorch, Flask, MongoDB, Redis, Kafka, Kubernetes, Openshift, AWS, Docker.

Responsibilities:

- ETL pipeline development for large dataset using Redis, Kafka, APIs development.
- Development of Microservices using docker and AWS services.
- Developing Batch data pipelines & Streaming Data pipelines and Decisioning Pipeline with robustness features.
- Implementation of Anomaly detection, Aggregating resources, Recommendation on future possible failures.

06/07/2015 – 06/06/2017

Software developer

NEC Corporation India

Project: OpenStack (Open Source Cloud Platform) & Energy Management System

Technologies: Python, Cloud Technologies, Linux, VM, Django, SQL

Responsibilities:

- Working with OpenStack, VM, Linux boxes, Software-defined storage (CEPH) performance testing.
- Deployment and Decommissioning of servers.
- Design, Deployment, Implementation, and Troubleshooting of servers.
- Development of Monitoring tool for telecom tower energy management.

20/06/2017 – 03/05/2018

Software developer

ZeOmega India Pvt Ltd

Project: Population Health Management Solution

Technologies: Python, SQL, Pytest, JavaScript, Angular JS

Responsibilities:

- Implementation of Rule based Engine to automate manual workflow.
- Development & Maintenance of APIs, queuing, pub/sub, and event stream mechanisms.

PROJECTS

01/07/2022 – 30/11/2022

Master Thesis: Hierarchical Semantic Segmentation for Multiple Heterogeneous Datasets

https://github.com/gautampawmesh/master_thesis

The goal is to develop a neural network that consequently perform well on a variety of datasets with different characteristics. In this, hierarchical architectures and embedding approaches are being explored and evaluated on cross domain datasets.

RVC Challenge: Semantic segmentation Network for Indoor and Road datasets.

<http://www.robustvision.net/leaderboard.php?benchmark=semantic>

3rd Rank at RVC 2022.

19/10/2020 – 29/03/2021

Master Project: Convolutional neural network attention estimation

<https://github.com/pawneshg/XAI-CFAMs>

Research and Implementation of saliency method based on neural network's feature embeddings for classification problem.

Data Science Project: Dynamic dashboard to analyse COVID data.

https://github.com/gautampawnesh/covid_19_data_stats

Implementation of CRISP process and predictive analysis using SIR (Susceptible Infected Recovery) Model.

Recommendation System for Online Music Subscription

https://github.com/gautampawnesh/recommendation_sys

Recommendation engine for online music subscription using machine learning and deep learning algorithm.

NLP: Sentiment analysis

https://github.com/gautampawnesh/project_nlp

Text sentiment analysis using machine learning algorithms.

DIGITAL SKILLS

My Digital Skills

GIT (GitHub) / Amazon Web Service (AWS) / Kubernetes(basic level) / Machine Learning and Deep Learning / Python / Docker / Computer Vision / Data Analysis Data Visualisation / programming, software engineering, software development / Azure Machine Learning Studio / Data Science AIML NLP DL Statistics DM Regression NNSegmentation Classification

LANGUAGE SKILLS

MOTHER TONGUE(S): Hindi

OTHER LANGUAGE(S):

English

Listening
C1

Reading
C1

**Spoken
production**
C1

**Spoken
interaction**
C1

Writing
C1

German

Listening
A2

Reading
A2

**Spoken
production**
A2

**Spoken
interaction**
A2

Writing
A2