

# Sarthak Vajpayee

**Data Scientist** 

# **Personal Profile**

Kaggle Expert | Top writer on Medium.

I'm a creative thinker, who enjoys nothing more than solving problems and fixing up things. I also love reading and writing about Data Science and build awesome custom electric guitars in free time.

## **Contact Details**

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Website: https://sarthakv7.github.io/my\_folio Linkedin: linkedin.com/in/sarthak-vajpayee/ Kaggle: kaggle.com/sarthakvajpayee

Github: github.com/SarthakV7

Medium: medium.com/@itssarthakvajpayee/

## **Skills**

- Udacity: Al for Trading Nanodegree.
- Coursera: Deep learning specialization.
- Applied roots: Certified Data Scientist.
- Google cloud: Advanced machine learning on Google Cloud specialization.
- Stanford University: Machine learning.
- Udemy: NLP with python.
- Udemy: Open-CV and Deep learning.
- Udacity: Machine learning for trading.
- Amazon: Getting started with AWS machine learning.

# **Research Projects**

- Imputation and Classification of Hepatocellular carcinoma Dataset using Machine Learning (under review).
- COVID-19 classification using cough audio and deep-learning (under review).

# **Career Summary**

#### SENIOR DATA SCIENCE CONSULTANT

EY (Ernst & Young) • Bengaluru, India December 2021 - July 2022

Used my role as a senior data scientist to forecast the demand for several FMCG goods across the Norwegian market.

Developed Statistical and Machine Learning models on highly intermittent timeseries data to generate a forecast of 104 weeks in the future.

The models outperformed the demand planners across all the categories achieving an accuracy of over 90% and a bias of under 15%.

#### **MACHINE LEARNING ENGINEER**

Applied Roots • Hyderabad, India September 2019 - November 2021

Designed, released, and maintained six Machine Learning and Deep-Learning projects in Applied Roots (an e-learning platform) along with mentoring and evaluating programming assignments of over 8000 students.

#### FREELANCE RESEARCH ASSISTANT

Stellenbosch University • Stellenbosch, South Africa March 2021 - November 2021

Collaborated with a research group at the University of Stellenbosch to research and develop a deep-learning-based algorithm for predicting COVID-19 using a patient's coughing audio.

Utilized crowd-sourced cough audio data from COVID-19 patients to design, train and fine-tune deep-learning architectures for diagnosis of COVID-19 through cough audio. The finest model achieved specificity and, sensitivity scores of 90% and 93% making the diagnostics of COVID-19 through this tool on par with the RT-PCR test.

#### FREELANCE DATA SCIENTIST

ViVi greens innovators • 's-Gravendeel, Netherlands October 2020 - Feburary 2021

Utilized object skeletonization, localization and, unsupervised learning (DBSCAN clustering) to develop and test a computer vision based product for extraction of plant cuttings, used in horticulture for vegetative (asexual) propagation.

### **Projects**

- Using deep-learning to colorize black and white images.
- COVID-19 classification using cough audio and deep-learning with results on par with the RT-PCR test.
- COVID-19 global dashboard with interactive data visualization.
- Japanese to English translator using attention enabled Encoder-Decoder model
- Kaggle Google Quest Q&A labeling challenge (top 4.4%)
- Kaggle Mercari Price Suggestion Challenge (top 6% using only linear models).
- Al-powered sudoku solver using CNN network. Along with API and web applications.
- Al-powered Indian license plate detector using CNN.
- Hand gesture to Emoji translator using custom CNN and YOLOv3.
- Clustering GRE high-frequency vocabulary words using Transformers (BERT) and K-Means.
- Indian traffic classification and segmentation using UNET and CANET for a self-driving car.
- Visit my website for detailed blogs and codes of these projects Website: https://sarthaky7.github.jo/my\_folio

# **Academic Background**

MASTERS IN BUSINESS ANALYTICS (DATA SCIENCE TRACK)

University of Texas at Dallas, Dallas, USA August 2022 to Present

B.TECH IN ELECTRONICS AND COMMUNICATION ENGG.

JSS Academy of Technical Education, Noida, India August 2014 to June 2018