

# HARENDRA K. VERMA

## MACHINE LEARNING ENGINEER

Experienced Machine Learning Engineer, with over 5 years of experience in AI Industry, and almost 2 years of experience in engineering analysis. I am an expert in exploratory data analysis for numeric, text and also experience for image datasets. I am a researcher and a problem solver and have the ability to apply Machine Learning or Deep Learning in different industry domains.

## Work History

2020-03 –  
Current

### Data Analytics Engineer

Vadict Innovations Pvt. Ltd., Vadodara, Gujarat

- Analysing and exploring data from IOT Sensors and creating AI models for predictive maintenance and process automation.
- Build ML/DL solutions for life prediction and anomaly detection for problems such as vibration, oil contamination detection, fault detection.
- Creating DL solutions for objection detection, OCR, NLP etc.
- AI on IOT edge: building AI models for stm32 microcontrollers.
- Developed an entirely new approach for image and text feature fusion using attention neural nets and VQA model based on text generation.

2018-01 –  
2020-03

### Machine Learning Engineer

Quest Global Engineering Services Pvt. Ltd.,  
Thiruvananthapuram, Kerala

- Predictive analytics solutions created using ML and DL.
- Build nlp solutions for document classification, document filtering and deep learning bots.
- Identified new problem areas and researched technical details to create proof of concept solutions.

2016-05 –  
2018-01

### Aerospace Engineer

Quest Global Engineering Services, Bangalore, Karnataka

- Worked on various projects on gas turbine combustor performance analysis using computational fluid dynamic.
- Regression analysis of Turbofan noise for different OGV positions using Ansys and MATLAB.
- Developed a new learn premixed pre-vaporized combustor design for better emission performance and published the work in ASME GTIndia Conference.

## M.S. Thesis

Tunable Diode Laser Absorption Spectroscopy Sensor creation with species CO and CO<sub>2</sub> using HITRAN dataset by mathematical modelling in MATLAB

## Major Publications

- CLEF 2020: Harendra K. Verma and Sindhu R., “HARENDRAKV at VQA-Med 2020: Sequential VQA with Attention for Medical Visual Question Answering”, 22-25 September 2020, Thessaloniki, Greece.
- ASME GTIndia-2017: Harendra K. Verma and Others, “Flashback and Lean Blow Out study of a Lean Premixed Pre-Vaporized Can Combustor”, 7-8 Dec 2017, Bangalore, India
- ASPACC 2013: Harendra K. V., Muruganandam T. M., “TDLAS Temperature Non-uniformity Sensor of CO and CO<sub>2</sub>”, 9th Asia-Pacific Conference on combustion, 19-22 May 2013, Gyeongju, South Korea, page-189

## Contact

### Address

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## Skills

Python



Predictive Analytics



Anomaly Detection



Exploratory Data Analytics



Time series Analysis



Forecasting



Machine Learning



Deep Learning



Keras/Tensorflow



OCR/ Zonal OCR



AI on IOT Edge



## Education

M.S. (2015)

Aerospace Engineering

IIT Madras, Chennai, India

B.E. (2010)

Aeronautical Engineering

Aeronautical Society of India,  
Delhi, India