# Vasudev Sharma


vasudevsharma74@yahoo.com

9790554447

vasudevsharma73.wixsite.com/portfolio

linkedin.com/in/vasudev-sharma-784a6a148

github.com/vs74


## EDUCATION

### B.Tech in Computer Science
VIT University, Vellore

*05/2016 – Present* *CGPA: 9.44/10*

### Senior Secondary School
MVN Aravalli Hills, Faridabad

*04/2014 – 05/2016* *Percentage: 93%*

### High School
MVN Aravalli Hills, Faridabad

*05/2010 – 06/2015* *GPA: 9.8/10*

## TECHNICAL SKILLS

**Programming Languages**
Python, TensorFlow, OpenCV, Keras, C/C++, Shell Script, HTML, JavaScript, CSS

**Databases**
MySQL / SQL,MongoDB

**Computing Environment, Frameworks, Simulators**
MATLAB, R-Studio, Hadoop, GIT, Docker, XAMPP

**Operating Systems**
Linux, Mac OS X, Windows

## PUBLICATIONS

*EI Compendex, SCOPUS and DBLP indexed*

**A Fuzzy Constraint Based Method for Outlier Detection**

*Author(s)*
Vasudev Sharma, Abhinav Nagpal, B.K. Tripathy

*August 2019*
International Conference On Intelligent Computing (ICIC2019), China

SpringerLink

*SCOPUS indexed*

**Visualization of Data Mining Techniques for the Prediction of Breast Cancer with High Accuracy Rates**

*Author(s)*
Vasudev Sharma, Raj Kumar Rajasekaran and Shreya Badhrinarayanan

*Jan, 2019*
International Journal of Computer Science

## OPEN SOURCE PROJECTS

Abandoned Object Detection (11/2018 – Present)
- Developing a real-time detection of abandoned objects in crowded areas under the supervision of former DEAN

## EXPERIENCE

### Research Intern - NeuroPoly Lab
Université de Montréal

*05/2019 – 08/2019* *Montreal, Canada*
*4 months*

*Achievements/Tasks*
- Developed a software AxonDeepSeg - Axon / Myelin segmentation using Deep Learning
- Implemented and integrated UNET model for segmentation on Keras framework for histological data ( SEM and TEM)
- Fine tuned model for optimal performance, refactored ADS codebase and performed an exhaustive comparative analysis with state of art methods
- Researched and incorporated dynamic functionality for handling overlapping patch effect on microscopy images

*Supervision:* *Prof. Julien Cohen-Adad – Director of NeuroPoly Lab*

### Data Science (remote) Intern
Council of Scientific and Industrial Research(CSIR)

*01/2019 – 06/2019* *Lucknow, India*
*6 months*

*Achievements/Tasks*
- Worked on Evaluation of Science reporting, patent database analysis, wherein scrapped important reporters worldwide using Selenium and Maltego from Linkedin, Twitter and report's publications
- Carried out tasks like geospatial visualisation, data analysis of reporters and manually filled missing fields in Science reporting database
- Build USPTO patent database, a US patent office, by web scrapping using BeautifulSoup, collating, data cleaning and preprocessing.

*Supervision:* *Dr. Sukant Khurana – Head of Data Science, AI, and Neurophysiology Lab*

### Academic Intern
National University of Singapore(NUS)

*12/2018 – 01/2019* *Singapore*
*2 months*

*Achievements/Tasks*
- Developed a Music Genre Classifier using Deep Learning under guidance of Prof. WANG Wei at NUS.
- Extracted Music features(MFCC's and FBE's) from raw audio files via speech analysis using Librosa package on GTZAN and Million Song Dataset.
- Optimized and implemented various machine learning(SVM, Random Forest) and state of art deep learning techniques(CNN, RNN, LSTM's).
- Performed Spectrogram and time series waveform analysis of different genres.

*Supervision:* *Prof. Wei Wang*

# OPEN SOURCE PROJECTS

Opinion Mining: Aspect Based Text Summarizer
(10/2019 – 12/2018)

- Developed an Aspect based sentiments text-summarizer rating systems on e-commerce using NLP.
- Worked on Text extraction, sentiment Classification, Dynamic and Static Aspect Extractor and Summarization of reviews.

Breast Cancer detection using Artificial Neural Networks
(06/2018 – 09/2018)

- MATLAB based GUI to predict breast cancer is Malign or Benign with help of feed-forward Neural Network(ANN).
- Used Adaptive filtering, GMM segmentation with Hidden Markov Models with EM(Expectation and Maximization),feature extraction(GLCM),prediction using Artificial Neural Networks on image dataset.

# POSITION OF RESPONSIBILITY

**Member**
Cognet.ai

*08/2017 – Present*
*Cognet.ai is a research group in VIT which focuses on areas related to Computer Vision and Deep Learning.*

*Tasks*

- Blog writing, organising events in University.
- Currently working on ''Abandoned Object Detection'' under Dean, SITE.

*Supervision: Dr. Aswani Kumar Cherukuri*

**Volunteer**
Child Rights and You

*06/2016 – Present*

*Tasks*

- NGO for helping out children from poor family background.
- Working towards providing a safe space to grow up for children in India.

# EXPERIENCE

**Intern**
Hewlett Packard Enterprise

*12/2018 – 01/2019* *Singapore*
*2 months*

*Achievements/Tasks*

- Worked on real-world data-sets using tools like Hadoop, Ambari, MapReduce (for Data Storage).
- Learned and implemented to set up Ambari clusters and applications build on its product Kafka, Hive and Sqoop.

*Supervision: Prof. Ravindra Kumar*

# ACHIEVEMENTS AND AWARDS

AICTE - INAE Travel Grant (07/2019 – 08/2019)
*Awarded a prestigious student travel grant by Government of INDIA to present my paper (outlier detection) at ICIC2019 conference, CHINA*

Charpak France Research Lab Scholarship (05/2019 – 08/2019)
*Awarded a fellowship by government of France to take a sponsored internship at a research institute in France for up to 3 months. A total of 21 interns were selected from all over India for this prestigious and competitive Scholarship.*

Excellent Student Award (12/2018 – 01/2019)
*Awarded with the Excellent Student Award at NUS for the project on ''Music Genre Classification'' among all the Interns.*

Udacity PyTorch(Deep Learning) Scholarship by Facebook AI
(07/2018 – 11/2018)
*Among 10,000 aspirants to receive scholarship and to study the how to build deep neural networks using PyTorch*

Institute Rank 7 (05/2016 – Present)
*Consistency in maintaining institute rank 7 among 2,000 students over the last 3 years at VIT Vellore. Receiving scholarships and awards for the same.*

Recipient of VITEEE2016 Scholarship (05/2016 – Present)
*Recipient of VITEEE2016 Scholarship among pool of 212,000 applicants*

1st rank in National Cyber Olympiad(NCO) at state level.
(09/2015)

# MOOC'S

Machine Learning by Prof. Andrew Ng
*Coursera*

TensorFlow for Deep Learning
*Stanford University*

Deep Learning Specialization by Prof. Andrew Ng
*Coursera*

Neural Networks for Machine Learning by Prof. Geoffrey Hinton
*Coursera*

Introduction to Computer Vision
*Georgia Institute of Technology*

Data Visualisation
*Courserra*

Image and Video Processing
*Duke University, Coursera*

Introduction to Data Science
*Michigan University,Coursera*