# VISHWESH RAVI SHRIMALI

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#### **EDUCATION**

Great Lakes Institute of Management

March 2019 - June 2019

Deep Learning Certification Program

e-Portfolio: https://eportfolio.greatlearning.in/-vishwesh-ravi-shrimali

Birla Institute of Technology and Science, Pilani

July 2014 - July 2018 CGPA: 9.34/10.0

Bachelors in Technology

Department of Mechanical Engineering

July 2012 - June 2014

Kendriya Vidyalaya STPS Suratgarh Senior Secondary High School, Class XII.

Overall Percentage: 93.8

Kendriya Vidyalaya STPS Suratgarh

Secondary High School, Class X.

Overall Percentage: 95.0

July 2010 - July 2012

#### CAREER OBJECTIVE

To work for an organization in the field of Machine Learning and Data Science, which gives me the platform to furnish my skills as well as benefit the organizational objective.

#### WORK EXPERIENCE

## Great Lakes Institute of Management

October 2019 - Present

Project Mentor

· Project Mentor for Secure Coding module in Stanford Advanced Computer Security Program offered by Stanford University in collaboration with Great Lakes.

Apress

April 2019 - October 2019

Technical Reviewer

· Technical Reviewer for Deep Learning Pipeline: Building a Deep Learning Model with TensorFlow by Apress.

#### **Packt Publications**

September 2018 - Present

Author

Wrote a book: Machine Learning for OpenCV, 2nd edition for Packt Publishing with Co-Author: Aditya Sharma. The book focuses on using OpenCV library for Machine Learning tasks and provides a comparison with the famous Scikit-Learn module in Python.

Currently working on OpenCV Workshop book by Packt Publishing to be released in January 2020. The book will cover topics from image and video processing, and advanced object detection, tracking and recognition.

#### Big Vision LLC

June 2018 - December 2019

Deep Learning and Computer Vision Expert

Dr. Satya Mallick

(Remote Job) Contributing in making course content for the OpenCV Official Computer Vision Course. Worked for several clients for the Consultancy Firm, Big Vision LLC to provide Computer Vision and Deep Learning solutions.

The blogs written can be found at https://www.learnopencv.com/author/vishwesh/

#### **PROJECTS**

## Foodie: Restaurant Search Chatbot using RASA

Built a chatbot using RASA to help users discover restaurants quickly and efficiently and to provide a good restaurant discovery experience. The restaurant search was performed using Zomato API.

## Modifying HMMs and Viterbi algorithm for POS tagging

Modified the Viterbi Algorithm to solve the problem of unknown words using morphological cues and using only one of the transition or emission probabilities for unknown words. The accuracy was increased from 87% to 93%.

# Predicting the Strength of high performance concrete

This project involved feature exploration and selection to predict the strength of high-performance concrete. Used Regression models like Decision tree regressors to find out the most important features and predict the strength. Cross-validation techniques and Grid search were used to tune the parameters for best model performance.

# Classifying silhouettes of vehicles

Classified vehicles into different types based on silhouettes which may be viewed from many angles. Used PCA in order to reduce dimensionality and SVM for classification.

#### Identifying potential customers for loans

Identified potential loan customers for Thera Bank using classification techniques. Compared models built with Logistic Regression and KNN algorithm in order to select the best performing one.

# Predicting the term-deposit subscription

Leveraged customer information of bank marketing campaigns to predict whether a customer will subscribe to term deposit or not. Different classification algorithms like Decision tree, Logistic Regression were used. Ensemble techniques like Random forest were used to further improve the classification results.

#### **Health Insurance**

This project used Hypothesis Testing and Visualization to leverage customer's health information like smoking habits, bmi, age, and gender for checking statistical evidence to make valuable decisions of insurance business like charges for health insurance.

## MIFARE Smart Cards Based Offline Iris and Fingerprint Detection and Recognition

To create an offline, user-friendly, time-saving, low cost and secure method of biometric scanning and matching, as well as database maintenance. This project was awarded with a Cash Prize of INR 10K and First Prize in Project Presentation Competition at BITS Pilani.

#### TECHNICAL STRENGTHS

Computer Vision and Deep Learning Libraries Software & Programming Languages PyTorch, Tensorflow, OpenCV, NumPy Linux, C, C++, C, Python, Javascript, Lua Julia, Docker, Binder, MATLAB AutoCAD, Scilab