



# KRISHNA VEER SINGH



<https://www.linkedin.com/in/krishna-veer-singh-30b36517a/>



<https://github.com/KrishnaVeer7712?tab=repositories>



[ks7712@bennett.edu.in](mailto:ks7712@bennett.edu.in)



6397535172

## COMPUTER SKILLS

### Programming Languages

Python, Java, C++, Artificial Intelligence and Machine Learning, Deep Learning, MySQL, HTML, CSS

### web application frameworks

Angular and Laravel

### Platforms

Linux and Windows

AWS and Google Cloud Platform

## EDUCATION

### B.Tech in computer science & eng.

2017-2021

Bennett University, Greater Noida

2017-present

CGPA: 6.9 (8.0 CGPA in last 2 years)

### Class XII CBSE

2016

Maria Residential Public School, Agra  
76%

### Class X ICSE

2014

Ragendra Swarup Public School, Agra  
82.4%

## ACHIEVEMENTS

- **DIAT** (Defence Institute Of Advanced Technology) [Certified Artificial Intelligence Professional](#)
- [DIAT Certified Information Assurance Intermediate Level](#)
- Project on "Digits classifications using Electroencephalography signals" (in Machine Learning) was **selected for the project exhibition** conducted by **"Times Of India"** in Bennett University.
- Secured 4th position in ACM HACKATHON on "Digital Bennett".
- Participation in **"Babson The 2019 Collaborative Student Challenge"**.

## ONLINE COURSES / CERTIFICATION

- **"DIAT CERTIFIED ARTIFICIAL INTELLIGENCE PROFESSIONAL"**, with Score of **80.67%**. Conducted by **DIAT (Defence Institute Of Advanced Technology)** and **DRDO (Defence Research and Development Organisation)**.
- **"DIAT CERTIFIED INFORMATION ASSURANCE INTERMEDIATE LEVEL"**, conducted by **DIAT (Defence Institute Of Advanced Technology)** and **DRDO (Defence Research and Development Organisation)**.
- Foundational Artificial Intelligence (an **industry-recommended** and validated course aligned to **SSC NASSCOM** Foundation AI curriculum).
- Blockchain Basics (an online non-credit course authorized by the **University at Buffalo and The State University of New York** and offered through Coursera ).
- AWS Academy Graduate - AWS Academy Cloud Foundations.
- Blockchain Essentials by **IBM**.
- FUNDAMENTALS OF DEEP LEARNING FOR COMPUTER VISION (By **NVIDIA DEEP LEARNING INSTITUTE**).
- **Google Cloud Platform** Fundamentals: Core Infrastructure.
- Fundamentals of Parallelism on Intel Architecture (By **Intel Software** ).
- The Data Scientist's Toolbox (By **Johns Hopkins University**, offered through Coursera).
- Programming for Everybody (By the **University of Michigan**, offered through Coursera).
- C++ Programming: Zero to Mastery (Offered through Udemy).
- C++ Programming - The Complete Course (Offered through Udemy) .

## WORK EXPERIENCE

### Software Developer and AI-ML research Intern

Atheropoint LLC, Roseville, California, United States

From 1st May, 2021

Currently, I am working as an AI-ML research intern and Software Developer at Atheropoint LLC from 1st May 2021. I Worked on the prediction of diseases using cohort knowledge and its power on projects like Rheumatology, Coronary, Psoriasis, Diabetes, Heart Data, also worked on prediction of cardiovascular disease risk factors, with Accuracies, ROC curve (receiver operating characteristic curve) with different Cross-Validations. optimize code using PCA pooling, Encoding class values as integers, and pre-processing of all covariates, etc. We also uses CVD calculators like Framingham risk score (FRS), Atherosclerotic cardiovascular disease (ASCVD) risk score and worked on various Statistical Tests like Baseline, Shapiro-Wilk Test and Tukey Tests.

## **Artificial intelligence and Deep Learning Internship :**

**LEADINGINDIA.AI (SUMMER INTERN 2019) (MAY 27, 2019 TO JUNE 31, 2019)**

I had worked on the Winton Stock Market Challenge ; Aim is to predict intra and end of the day returns using already given historical stock performance. we filtered noise data from the given dataset and used regression based neural networks in Python to make stock predictions utilizing masked features.

## **Software Engineering Virtual Internship :**

**JPMORGAN CHASE & CO. (APRIL 2020 TO MAY 2020)**

we have to complete practical task modules in: Establishing Financial Data Feeds, Frontend Web Development, Data Visualization with Perspective.

## **NAVIGATION MAPPING Using HERE Map Creator**

**HERE TECHNOLOGIES (THREE MONTHS SUMMER INTERN, 2020)**

we are trying to doing updates in a specific area using HERE Map Creator. This updating includes Main House Number and points of interest (add address, roads, buildings, etc) using API.

# **FACULTY DEVELOPMENT PROGRAMS**

## **Faculty Development Program on "Systems Engineering" (4th – 8th November, 2020)**

participated & completed successfully AICTE Training And Learning (ATAL) Academy Online FDP on "Systems Engineering" from 2020-11-4 to 2020-11-8 at **National Institute of Technology, Kurukshetra, India.**

## **Faculty Development Program on "Data Science for ALL" (27 July - 8 August, 2020)**

Jointly organized by Electronics and ICT Academies - **NIT Warangal, IIITDM Jabalpur and NIT Patna** and Supported by Ministry of Electronics and Information Technology (**MeitY**).

## **Faculty Development Program on “Deep Learning and its Applications” (17th – 22th June, 2020)**

Organized by Electronics & ICT Academies, **NIT Patna** (Supported by Ministry of Electronics and Information Technology (**MeitY**), Govt. of India) .

# **FINAL SEMESTER RESEARCH AND DEVELOPMENT PROJECT**

## **Lung CT Image Segmentation and COVID-19 Infection Detection**

**MACHINE LEARNING (5 MONTHS)**

From 1st January 2021 to 31st May 2021, we have created a GUI and Our main goal is to first Segment Lung from CT Images of patients and also detect which part of the lung is having COVID-19 infection in the patient Lung. For Segmentation, I had used a Marker-based watershed algorithm using Otus's binary thresholding and a watershed algorithm using Sobel-Gradient. For Covid - 19 Infection Detection I will use (CLAHE) Contrast Limited Adaptive Histogram Equalization to enhance the contrast of the images since medical images suffer a lot from the contrast problems and Unet Base on ResNet34 model.

# CAPSTONE PROJECT

## **"INDIAN NATIONAL SAFETY MANAGEMENT" in the sub-module fire management.- MACHINE LEARNING**

We have created a micro-service like module which can be integrated into CCTV control centers to detect fires using Computer Vision and ML from the CCTV cameras and provide updates on a dedicated web application which is hosted online. The motivation behind the project was the increasing number of CCTV installments in the country, which led me to do something about automating the process of anomaly detection so that little to no manual work is needed, anomalies such as fire is detected immediately and prompt response is initiated.

## MAJOR PROJECTS

### **Digits classifications using Electroencephalography signals- MACHINE LEARNING**

**This project was selected for the project exhibition conducted by "Times Of India" in Bennett University,**

EEG measures (volts) electrical activity generated by the activity of neurons in the brain. Waves at specific frequency patterns are examined for arriving at results. We are trying to solve the existing problems in the classification of brain signals to digits (0-9). We aim to classify digits on a standard dataset named "MindBigData". Our proposed approach is to fit the available models with machine learning methods like LSTM and SVM to attempt in increasing the accuracy obtained in data analysis and digit prediction. The results obtained show the accuracies which were achieved with the classification techniques. 90% for the training set and 90% for the validation set. The proposed method was effective for multiclass EEG signal recognition.

### **Election Decentralized Application BLOCKCHAIN**

Decentralized application on Ethereum blockchain, write Ethereum smart contract, where we'll hold an election between two candidates, write tests against the smart contract, deploy it to the Ethereum blockchain, and develop a client-side application that allows accounts to cast votes.

### **Future Stock Prediction using Neural Networks DEEP LEARNING**

The purpose of this project is to take on the Winton Stock Market Challenge on Kaggle sponsored by Winton Capital. The aim of this challenge is to predict intra and end of the day returns using already given historical stock performance and a host of masked features. The different approaches adopted in this project utilize regression using Neural Networks to make future predictions of stock returns, whose performance is measured by loss and Mean Square Error. In order to predict the future stock returns, given the data, the best fitting models would be Long Short Term Memory Networks and the Sequential Model.