# **SUMMARY**

- Knowledge in development of centralized web applications using Python3, Django, HTML5, CSS, SCSS. JavaScript, jQuery, Bootstrap 4, DOM (Document Object Model), REST API's.
- Intermediate knowledge in Java, C++.
- Strong knowledge and course experience in different phases of Software Development Life cycle (SDLC) including Requirements, Design, Implementation and Testing during the development of software applications.
- Known IDE's Eclipse, PyCharm, Jupyter Notebook, Spyder, Visual Studio.
- Experience in writing smart contracts using **Solidity**.
- Extensive knowledge in development of decentralized applications using **Ethereum development tools, React and Web3**.
- Strong knowledge in Data Science concepts
  - Data Manipulation using Python, Pandas data analysis library and MySQL.
  - Importing and Cleaning Data using Python.
  - Visualizing Data using Matplotlib, Seaborn, Bokeh, D3.js and GoogleCharts(JavaScript).
  - Statistical Inference such as Parameter Estimation and Hypothesis Testing using Python.
  - Deep Learning fundamentals using TensorFlow and Keras.
- Experienced in using both **Linux** and **Windows**.
- Experienced in using Version Control systems like **Git, Bitbucket**.

## **EDUCATIONAL CREDENTIALS**

MASTER OF SCIENCE (M.S.) IN **COMPUTER SCIENCE**, GRADUATED: MAY 2019

California State University, Long Beach, CA Specializing in **Advanced Systems**.

BACHELOR OF TECHNOLOGY (B.TECH.) IN **Information Technology**, JULY 2017

Galgotias College of Engineering and Technology, Dr. A.P.J. Abdul Kalam Technical University, India.

## **RELEVANT COURSEWORK AND PROJECTS**

## **CALIFORNIA STATE UNIVERSITY LONG BEACH**

- FALL 2017
  - CECS-524 Advanced topics in Programming Languages
  - o CECS-526 Advanced Operating Systems
  - o CECS-543 Advanced Software Engineering
  - o CECS-575 Object Oriented Analysis & Design
- SPRING 2018
  - o CECS-528- Advanced Analysis of Algorithms
  - o CECS-542- Requirements Engineering
  - CECS-561- Hardware Software Co-Design
- SUMMER 2018
  - o CECS-451 Artificial Intelligence
- FALL 2018
  - o CECS-532 Memory Design Implementation
  - CECS-590 Deep Learning

#### **PROJECTS**

- Predicting hand drawn sketches using Google's QuickDraw dataset in real time
  - Used **Python3** for implementation.
  - Used **OpenCV** to provide user input.
  - Used Tensorflow to implement Convolutional Neural Network that classified data.
  - Used Cross Entropy Loss Function and ADAM optimizer for Training.
  - Achieved model accuracy of 94%.
- Real Time Audio Filter -
  - Used Vivado Design Suite and Zybo Zynq-7000 ARM/FPGA SoC board for hardware implementation.
  - Used Xilinx SDK for software side implementation. Used C# for implementation.
- Simulation Based comparative study of open source memory simulators that model DRAM and NVM's –
  - Used Open Source memory simulators such as **DRAMSim2**, **Ramulator**, **GEM5** and **NVMain** to simulate different standards of memory.
  - Results of the simulations were quantitatively compared on metrics such as **Simulated Clock Cycles, Throughput, Memory Consumption** and **Average Power Consumption**.
  - Used **LaTeX** to write the research paper.
- Personal Portfolio website
  - Used HTML5, CSS3, JavaScript for implementation.
  - Some libraries used were jQuery , Bootstrap4 , Animate.js , WOW.js , inview.js etc
  - View it on vanshbajaj.me.

## **WORK AND ADDITIONAL INFORMATION**

### I.T. INTERN (16 JUNE 2016 – 15 JULY 2016)

Johnsons Control, Pune.

### Responsibilities:

- Worked with the IT department to effectively analyze and solve technical issues.
- Developed a content management system using **Struts, JSP, JavaScript, Hibernate, HTML** and **CSS**.
- Conducted research, compiled data and prepared requirements for an office wide portal.
- Used **Eclipse** as the IDE for implementing the application.
- Deployed the system through **Apache Tomcat**.

**Languages:** English (fluent), Hindi (fluent).

#### **Certifications:**

- Completed the Ethereum & Solidity: The Complete Developers Guide on Udemy.
- Completed the Python & Django Web Developer's Guide on Udemy.
- Completed the Python Programmer career track on DataCamp.
- Completed the Data Analyst with Python career track on DataCamp.
- Completed the Data Scientist with Python career track on DataCamp.

**Interests:** Trading, Basketball, Cricket, Working out, History, Politics, Reading.