



# **NAMAN BHALLA**

HOUSE NUMBER 15, RJLB GOVERNMENT POLYTECHNIC, LOHARU, HARYANA

PIN - 127201 T: +91-9996203771 Web: http://namanbhalla.in

LinkedIN: https://www.linkedin.com/in/namanbhalla/

<u>E-Mail:</u> contact@namanbhalla.in | naman.bhalla.16csc@bml.edu.in



# **Summary**

Pythonista, Algorithmist, Data Science Enthusiast. Applying Deep Learning to Natural Language Processing or Computer Vision problems.

# **Objective**

Looking for opportunities that allow me to apply Computational Thinking to help solve problems that make impact on a big scale and further enhance my knowledge. Interested in doing work in the areas of Deep Learning, with focus on applications in Computer Vision, Natural Language Processing, or Robotics.

### **Research Experience**

- Nurture.Al
  - Global NIPS Paper Implementation Challenge ( <a href="https://nurture.ai/nips-challenge">https://nurture.ai/nips-challenge</a>)
    - Worked to implement papers published at NIPS 2017 in frameworks like Tensorflow, Keras and PyTorch. Learnt a lot about research experience via regular Office Hours by Expert Mentors.
  - Al Saturdays Ambassador ( https://nurture.ai/ai-saturdays )
    - Working to organize Study Groups and weekly Meetup sessions to study openly available Deep Learning course materials in groups, implement and discuss them.
- BML Munjal University
  - Working with Dr. Satyendr Singh (<a href="https://sites.google.com/site/satyendr/">https://sites.google.com/site/satyendr/</a>) to apply Deep Learning approaches in Natural Language Processing to Indian Languages and advance the progress of NLP Research in these languages. We find many complexities involved with understanding non-English languages and working on how it can be handled.

#### **Projects**

#### - Interactive Shortest Path Finder

Built an Interactive Shortest Path Finder using Java and Shortest Path Algorithms (Djikstra). The project aimed at mapping the whole university and marking various destinations as special points and using Djikstra's Algorithm to compute the Shortest Distance from one to another as per the request from the user. The project also listed the complete path with the views at various points one has to cross from, in a visually pleasing way.

#### - DNA Analysis

Used knowledge of Python and Scientific Libraries like NumPy, Matplotlib to analyze a DNA sequence and convert to corresponding Protein Sequence. Pair Wise alignment and scoring matrix was made. Also wrote algorithms to find hydrophobicity plot for the protein sequence.

Image Recognition using Linear Regression and Neural Networks

Did this as a project for the Coursera Course on Deep Learning and Neural Networks by Andrew Ng.

Used the knowledge of Tensorflow, Python, NumPy in building a Neural Network for image Recognition that could achieve up to 80% accuracy.

- **Empty Parking Space Detector** 

Did this as a project for "Joy of Engineering" course at the university. Project made use of Arduino and Ultrasonic Sensor to detect presence of object. Learnt debugging Real Life hardware projects when the sensor started misbehaving.

## Education

- BML Munjal University
  - August 2016 May 2020 (expected)
  - o B.Tech, Computer Science and Engineering
  - o CGPA 9.61 / 10
- Thukral Public Senior Secondary School
  - o April 2014 April 2016
  - o 12<sup>th</sup>, CBSE Board, 87.2%
- Birla School, Pilani
  - o November 2011 March 2014
  - o 10<sup>th</sup>, CBSE Board, CGPA 10 / 10

## **Skills**

Programming Languages: - Python, Java, C, HTML

<u>Frameworks and Libraries</u>: -<u>Tensorflow</u>, Keras, Numpy, Scipy, Matplotlib, pandas Toolkits and IDEs: - IPython Notebook, Android Studio, IntelliJ, Sublime Text, Atom

Others: - Git, Data Structures, Algorithms, Deep Learning, Unix, Android App Development

# **Certifications**

- Neural Networks and Deep Learning Coursera License VHGE5ECV5CHK
- Improving Deep Neural Networks Coursera License Y3LTLJTS2PN9
- Python Coursera License T6KF7U9RTDH7

#### **MOOCs**

- Algorithms (Stanford University)
- Introduction to Algorithms (MIT OCW)
- Machine Learning (Stanford)
- Deep Learning Specialization (deeplearning.ai)
- Convolutional Neural Networks for Visual Recognition (Stanford)
- Natural Language Processing with Deep Learning (Stanford)
- Mathematics for CS (MIT OCW)
- Automata Theory (Stanford)

## **Personal Details**

<u>Languages Known: -</u> English, Hindi, Punjabi

<u>DOB: -</u>

October 24, 1998