# Susanta Biswas

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### **EDUCATION**

## NATIONAL INSTITUTE OF TECHNOLOGY

B.TECH IN COMPUTER SCIENCE Expected June 2018 Durgapur, West Bengal Cum. GPA: 8.72 / 10.0 (7th Sem)

### KENDRIYA VIDYALAYA

HIGH SECONDARY | CBSE Grad. March 2014 | Kachrapara, W.B 91.6 %

### **KENDRIYA VIDYALAYA**

SECONDARY SCHOOL | CBSE Grad. March 2012 | Bagdogra, W.B CGPA: 10.0 / 10.0

### LINKS

Github:// susantabiswas LinkedIn:// susantab Quora:// Susanta-Biswas-9

### RELEVANT ONLINE COURSEWORK

#### COURSERA DEEPLEARNING.AI

- Sequence Models Grade: 100.0%
- •Convolutional Neural Networks Grade: 100.0%
- Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization Grade: 100.0%
- Structuring Machine Learning Projects

Grade: 100.0%

• Neural Networks & Deep Learning Grade: 100.0%

### COURSERA STANFORD UNIVERSITY

• Machine Learning Grade: 100.0%

### TECHNICAL SKILLS

### **MACHINE LEARNING**

• Scikit-learn • Keras • Tensorflow • Pandas • Numpy •

#### **PROGRAMMING**

Experienced: C++ • C • Python Familiar:

C# • Octave • .NET• MySQL• Flask •

### **EXPERIENCE**

### COMPLEX NETWORKS RESEARCH GROUP, IIT KHARAGPUR SUMMER INTERN

May 15th, 2017 - June 30th, 2017 | Kharagpur, W.B

- Word Prediction using n-gram Probabilistic Model
- Created word level Language Models for doing word prediction using n-gram Probabilistic Model.
- Incorporated and implemented Interpolation and backoff models with Knesser Ney, Good Turing smoothing methods for enhancing word prediction accuracy.

### SELECTED PROJECTS

### REALTIME FACIAL RECOGNITION SYSTEM

KERAS | OPENCV | CNN

Developed realtime Facial Recognition system using Siamese Neural network. The model generates facial encodings for identifying users.

### LANGUAGE TRANSLATION USING NEURAL MACHINE TRANSLATION | Keras | Machine Translation

Sequence to sequence model for Language translation from English to French. This model uses a sequence to sequence Encoder-Decoder network with LSTM cells.

### TRIGGER WORD ASSISTANT | KERAS | SPEECH

Developed a Voice based assistant application that can executes task on detecting the trigger word from the user voice. Uses a Neural Network with Gated Recurrent Units (GRU) for Trigger Word detection.

### EXPRESS PHRASES USING EMOJI | KERAS | LSTM

Associates English phrases with appropriate Emoji. Using a deep LSTM network the model associates an English input sentence with an emoji.

# **NEURAL DATE TRANSLATION** | Keras | Machine Translation | Attention | Encoder-Decoder

Developed a model that can translate a conventional Human readable date to machine readable date format (YYYY-MM-DD). Developed using sequence to sequence encoder-decoder network with Attention with LSTM units.

### TEXT ARTICLE GENERATOR | KERAS | TEXT | LANGUAGE MODEL

Text Article generation using LSTM network. It uses a Character level Language model implementation for the sequence generation task.

### WORD ANALOGY | KERAS | WORD EMBEDDINGS

Finding word analogies using GLoVe word Embedding. In the word analogy task, we find 'd' such that "a is to b as c is to d". For example, 'boy is to girl as king is to queen'.

### LIVE HTML EDITOR | .NET | C#

Developed an Editor for Windows Desktop that can show the live web preview of the HTML code being written on the side Pane Window.

### **ACHIEVEMENTS**

• Secured **51st** rank in Hackerearth Deep Learning Challenge 2. Hackerearth Username: susanta1 **13**, **2017 - JAN 31**, **2018**