Sumit Agarwal

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EDUCATION

IIT KHARAGPUR
B.Tech in Computer Science & Engineering
Graduated May 2017 | Kharagpur, India
Cum. GPA: 9.75/10.00

BHARATIYA VIDYA BHAVAN
Higher Secondary, CBSE
Passed 2013 | Kolkata, India
Marks Obtained: 97%

NOPANY VIDYALAYA
Secondary, WBBSE
Passed 2011| Kolkata, India
Marks Obtained: 92%

LINKS

LinkedIn:// **iamagarwalsumit**
Github:// **iamagarwalsumit**
Facebook:// **iamagarwalsumit**
Twitter:// **@meagarwalsumit**

COURSEWORK

CORE
Algorithms
Computer Networks+
Operating System+
DBMS+
Computer Organization and Architecture+
Compilers+
Software Engineering+
Theory of Computation+

NON CORE
(I) Machine Learning+
(I) Deep Learning+
Artificial Intelligence+
(I) Natural Language & Processing+
Information Retrieval+
Smartphone Computing+
Image Processing+
Foundations of Cryptography

+ - Excellent Grades, (I) - Interests

SKILLS

LANGUAGES KNOWN
C• C++ • Python • Java • HTML • CSS • JavaScript • PHP • MySQL • Assembly

FRAMEWORKS
TensorFlow • Angular JS • Electron • Solr • Spring • Django • Matlab • Android

EXPERIENCE

SAMSUNG | Software Engineer
Expected Jun'17 - Present | Bangalore
- Currently working as a part of Bixby(Voice Assistant of Samsung) to enable consisitent multi device experience across devices(TV, mobile, speaker).
- Worked for Bixby 2.0 which used random forests for classification and dynamically generated plans based on the utterance's context.
- In Bixby 1.0, Convolutional Neural Networks(CNN) were used for classication and attention mechanism coupled with Recurrent Neural Networks(RNN) was used for resolving the utterance's context.

SAMSUNG | Software Developer Intern
Expected May'16 - Jul'16| Bangalore
- Worked with the Samsung Pay team on the UPI interface.
- Worked on sms mining and extracting information from transaction messages using basic classification and NLP techniques.

NATIONAL DIGITAL LIBRARY | Software Enginnering Intern
Expected May'15 – July'15 | IIT Kharagpur, MHRD | https://ndl.iitkgp.ac.in
- Worked on building a search engine for the national digital library using Apache Solr as the backbone
- Enabled multilingual support in the UI as well as the search(bystemmers) aimed to enable searching and retrieving in different Indian languages

PROJECTS & RESEARCH WORK

SOCIAL OPINION DYNAMICS | B.Tech Project
Prof Nlioy Ganguly | CSE, IIT Kharagpur
Predicting future opinions of users and their peers in social networks by applying deep learning methods like recurrent neural networks. Paper titled "Learning Non Linear Opinion Dynamics in Social Networks" accepted in International Conference on Data Mining(ICDM'17).

COMMBOX | Term Project | Smartphone Computing
Prof Nlioy Ganguly | CSE, IIT Kharagpur
A real time commentory box which uses machine learning techniques and real time sensor data (accelerometer, gyroscope) from wearable devices to predict the type of cricket shot played. The project recieved the best demo paper award at COMSNETS'17.

SCIENTIFIC ARTICLE SUMMARIZATION | Term Project | NLP
Prof Pawan Goyal | CSE, IIT Kharagpur
Using techniques like LSTM, GRU to summarize scientific articles and compare the result with the abstract of the paper.

VEHICULAR ENVIRONMENT DETECTION | Term Project | ML
Prof Pabitra Mitra | CSE, IIT Kharagpur
Using Convolutional Neural Networks and a technique of Blind Colour Decomposition to predict the direction of travel, right, left, straight or blockage from road images.

ACADEMIC AND EXTRA CIRRICULAR

2017	Graduated with Department Rank of 3 and Institute Rank of 5
2017	2nd in Data Analytics,General Championships, IIT Kharagpur
2016	3rd in Hindi Elocution,General Championships, IIT Kharagpur
2013-15	Captain at National Service Scheme, IIT Kharagpur