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 consistent 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) was used for classification 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(by stemmers) to allow 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, i.e., 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