Sumit Agarwal

iamagarwalsumit@gmail.com | +91-7278334160 | https://iamagarwalsumit.github.io

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 • Diango • 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) was 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(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