Sumeet Ranka
R2-904, Alpine Eco Apartments
Doddanekkundi
Bangalore, India - 560037
Webpage: ranka47.github.io

+91-8011034051
sumeet.ranka47@gmail.com
sumeet.ranka@iitg.ernet.in
LinkedIn Profile
Github Profile

Degree	University/Institute	CPI/Percentage	Year
B. Tech - Computer Science and Engineering	Indian Institute of Technology Guwahati	8.86/10	2013 - 2017
Senior Secondary	Shivaji Science College, Nagpur	92.83	March, 2013
Secondary	Bhartiya Vidya Mandir, Civil Lines, Nagpur	10/10	March, 2011

EXPERIENCES

Research Engineer at Samsung Research Institute - Bangalore   *JUNE 2017 – Present*
Division: Intelligence and IoT
Tools Used: Apache Spark, Hadoop File System, Scala

Come up with innovative features for Samsung's smart devices that can make life more secure and comfortable for users. It involves analysis of usage data, understanding input constraints and studying current research trend in smart home environment domain.

Summer Intern at 'Flipkart India Pvt. Ltd.'   *MAY – JULY 2016*
Title: Tiered Data Store - Automation Testing Module
Mentor: Mr. Sumit Pilankar, Engineering Manager
Tools Used: Apache JMeter

TDS is a hierarchical data store that uses Vitess and HBase to store data.

- Developed **Functional and Performance Testing** modules for the database architecture.

- Identified bottlenecks and limitations in the TDS architecture.

- Modularised to configure and develop new testing modules easily.

PROJECTS

STUDY OF COEXISTENCE OF LTE-U and IEEE 802.11n   *Bachelor Thesis Project*
Prof. Sukumar Nandi, Dept. of CSE, IIT Guwahati

1. Analyze the feasibility of seamless-handoff between the two networks using Integrated Switching Network
2. Identify the drawbacks and bottlenecks in the currently proposed architecture (LTE-U/LAA) for coexistence
Tools Used: Network Simulator 3

ASSISTIVE DEVICE FOR HAND AMPUTEES   *OCT - NOV 2015*
Prof. S. B. Nair, Dept. of CSE, IIT Guwahati

Device to support people who have their arms amputated below the elbow. Provides two major support:
1. Enable the user to use a computer by acting as a convenient interface for keyboard and mouse.
2. Enable the user to transport heavy objects by having a transport robot that they can control.
Tools Used: Arduino, Python

USING SPATIAL TRANSFORMER NETWORKS FOR EGOCENTRIC IMAGES   *SEPT - NOV 2016*
Prof. Arijit Sur, Dept. of CSE, IIT Guwahati

Implementing spatial transformer networks (introduced in Google DeepMind) for object recognition and activity prediction from egocentric images and evaluating it on GTEA dataset. The model showed better results than a traditional CNN model.
Tools Used: Tensorflow

TEXT READABILITY ANALYSIS USING LANGUAGE MODELS   *FEB-APR 2017*
Prof. Ashish Anand, Dept. of CSE, IIT Guwahati

Developed an unsupervised approach for predicting text readability scores. Implemented deep-learning and statistical models for comparing results with vocabulary-based and syntactic approaches.

PLEXUS   *MAR 2015 - JAN 2017*
Dean of Alumni and External Relations, IIT Guwahati

Social media platform to bring together the whole IITG community.
Involved figuring out the database design and relationships among the tables. Implemented features like search directory, pagination, recent campus and alumni chapters' activities and frontend design.
Tools Used: Django

ACHIEVEMENTS & TALKS

- **SPOT Award** at Samsung Research Institute for outstanding work
- Invitee as Session Speaker at IIT (BHU) Varanasi in **QIP-STC 2017** themed on *"Machine Learning: Trends, Perspectives & Prospects"*
- Ranked 11 in **Microsoft – Build the Shield 2015**, a team based event on Software and Network Security
- Qualified for the Onsite **ACM-ICPC (Amritapuri) – 2014 (India)**, a competitive programming contest
- Represented IIT Guwahati in **Inter IIT Workshop on Alumni Relations & Fundraising**
- Delivered talks on various topics (*IITG Network Architecture, Introduction to Programming, Object Oriented Programming Structure*) as UG student in IITG

TECHNICAL PROFICIENCY

- Languages: C/C++, Python, Scala, Javascript, Visual Basic (Basic)
- BigData Tools: Hadoop, Apache-Spark
- Frameworks: Django
- Operating Systems: GNU/Linux, Windows
- Tools and IDE : Apache JMeter, Visual Studio (Basic), Eclipse
- Miscellaneous: MySQL, Git, LaTeX

COURSES TAKEN

Computer Science: Data Structure$^{\#}$, Algorithms, Formal Languages, Theory of Computation, Operating Systems$^{\#}$, Compilers$^{\#}$, Databases$^{\#}$, Networks$^{\#}$, Computer Graphics$^{\#}$, Digital Design, Computer Organisation & Architecture, Software Engineering$^{\#}$
Math: Probability Theory and Random Processes, Optimization
Artificial Intelligence: Artifical Intelligence, Computer Vision using Machine Learning, Information Retrieval$^{\#}$, Intelligent Systems & Interfaces
Miscellaneous: Parallel Computing$^{\#}$, Internet Protocols, Computer Peripherals and Interfacing Lab
- Accompanied with Lab Courses

POSITIONS OF RESPONSIBLITY

Peer Mentor   *AUG 2015- APR 2016*
Counselling Cell, IIT Guwahati

Mentored 8 first-year students regarding every aspect of the academic and hostel life that they will be experiencing. The main objective was to help them in easy transition to college life and cope up with a new atmosphere.

Team Leader   *JAN - APR 2015*
Prof. P. K. Das, IIT Guwahati

Worked on three different projects **(Form Validation Library, Course Management Portal with Excel as BackEnd, Vehicle Management and Security)** along with different teams using Visual Basic, Visual C++ and Django respectively. Database design, integration and debugging were the important tasks.

Core Team Member   *NOV - SEPT 2014*
Technothlon - IIT Guwahati

Organized an inter-school contest in 23 districts for 5000 students. Found national media partner (Dainik Bhaskar). Designed and organized a game named 'Battle of Hogwarts'.