

# **SHUBHAM RAHUL NAGARIA**

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CGPA: 7.83



ACADEMIC DETAILS						
COURSE	SPECIALIZATION	INSTITUTE/COLLEGE	BOARD/UNIVERSITY	% CGPA	YEAR	
XII	Science	Tulip International School	CBSE	90.6	2014	
X	General	Army Public School	CBSE	10.0	2012	

### **ELECTIVES/TECHNICAL PROFICIENCY**

Electives Data Structures And Algo, Object oriented programming and design, Operating Systems, Data Base Systems, Computer

Networks, Artificial Intelligence, Number Theory, Image Processing

Technical Proficiency C/C++, Android Programming, Java, Python, Qt Programming, HTML5, Unity Game Development, Git, Writer, Spreadsheet,

Android Studio, Eclipse, Matlab, IDLE, QT 5.5.1, Sublime Text 3

## SUMMER INTERNSHIP/WORK EXPERIENCE

### Samsung Research Institute, Noida

May 2017 - Jul 2017

### **Neural Machine Translation**

- · Researched and implemented a neural network model for machine translation.
- · Studied various existing NMT systems developed by Google, Microsoft and Facebook.
- · Researched and implemented representational embedding of words using word2vec algorithms

AppShades Aug 2016 - Jan 2017

# **Mobile Application Development using Augmented Reality**

- Developed an Android application using marker based Augmented Reality technology to recognize images and then overlay interactive graphics, which is further used as innovative marketing ideas
- Used Adobe Aviary SDK for giving user an option to edit their AR items and hence help user get a personalized AR experience.
- Used Google Firebase as backend which stores and accesses all the AR items in real time.

HMT Machine Tools Pvt. Ltd. May 2016 - Jul 2016

### **Machine Monitoring using IOT technology**

- This project was a part of Practice School managed by BITS PILANI.
- The problem statement was to increase the efficiency of lazy workers in government industries by monitoring them without constantly watching them(no CCTVs), which can be done indirectly by monitoring machines and its daily usage.
- We collected sensor data from machines using Arduino and industrial sensors and stored it in a third party data logging portal and then analyzed the data by running it on algorithms developed by me.

SuperProfs Jun 2015 - Jun 2015

### **Content Development**

Developing IIT JEE question bank for IIT JEE section of SuperProfs.com, an online coaching startup

### **PROJECTS**

# Developing webapp for Actnowledge, a computer adaptive testing(CAT) platform

Jan 2017 - May 2017

- This was done as a part of Technology Innovation Center(TIC) Project done during 6th semester under Vimal Bhaya(Founder of Actnowledge).
- Developed the backend of the website using Flask and SQLAlchemy libraries.
- · Designed and developed an auto tagging system for classifying questions into different topics as provided by Common Core Standards.
- Exploring various algorithms for estimation of item parameters which forms the basis of Computer Adaptive Testing.

# Mobile Chat Application using WiFi Direct

Jan 2016 - May 2016

- This was a Study Project, done under Prof. Virendra S Shekhwat .
- The objective of this study project was to develop a basic android chat application which uses WiFi Direct as communication medium.
- This could be extremely helpful during natural calamities like earthquakes and floods when all the network towers are demolished. The rescue team can
  connect with the survivors and ask them for their locations, etc.

# TypeRacer, a multiplayer typeracing game

Apr 2017 - May 2017

- This game was developed as a part of CSF303 Computer Networks Mini Project.
- Typeracer is 6-level multiplayer networking game, TypeRacer. The game has a common whiteboard for all the users and leaderboard for displaying the game-screen and the scores.
- The game is able to concurrently handle all the requests for its users and update the scores (based on number of characters typed in the current game) accordingly.
- The levels of the game are defined in terms of the dictionary being chosen for the playing the game. 6 different types of dictionaries, English, French, Programming etc. are provided with the game.

## **Decentralized Path Planning for MultiRobot Systems**

Aug 2016 - Dec 2016

- This project was done as a part of Artificial Intelligence course.
- Designed and implemented modified Djikstra algorithm for multi robot systems
  Developed a small proof of concept in C with simple GUI.

ERPLAG Compiler Jan 2017 - May 2017

- This project was done as a part of CSF363 Compiler Design Course.
- Implemented the DFA, CFG, lexer, parser for ERPLAG.
- Implemented the Abstract syntax tree, symbol table, code generation for ERPLAG.

# **POSITION OF RESPONSIBILITY**

# IEEE, BITS Pilani-Pilani Chapter

Aug 2016 - Jul 2017

- Worked as APOGEE Project Coordinator for IEEE BITS Chapter
- Organizing technical events in APOGEE( BITS Technical Fest)
- Organized a global coding event, Codeathon.

# **ACHIEVEMENTS AND AWARDS**

Kishore Vaiqyanik Protsahan Yojana(KVPY) Scholar	2014	
Scored 377/450 marks in BITSAT 2014	2014	
Secured 2419 rank in IIT-JEE 2014	2014	
Achieved 1st rank in a 24 hour hackathon organized by Viacom 18	2017	
Completed Microsoft Code.Fun.Do ( develop an app in 24 hours) two years in a row	2016	
Secured 349 rank in ACM ICPC coding competition, India regionals	2016	
Ranked 34 in Global English Language Test (ELT)	2012	
Achieved 1st rank in Business Master, a logical quizzing event held during APOGEE(BITS Technical Fest)		

# **EXTRA CURRICULAR ACTIVITIES**

Playing Table Tennis and Carrom

Novice Keyboardist

Addicted to sports programming