Deepak Yadav
Department of Computer Science and Engineering

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Academic Qualifications

Year	Degree/Certificate	Institute	CPI/%
2018-present	M.Tech(Computer Science & Engineering)	Indian Institute of Technology, Kanpur	8.86/10
2012-2016	B.Tech(Mechanical Engineering)	MRCE, Faridabad(MDU,Rohtak)	70.1%
2012	CBSE(XII)	D A V Public School	81.16%
2010	CBSE(X)	D A V Public School	8.2/10

Scholastic Achievements

- 2018 *Among top **99.5%** in Graduate Aptitude Test in Engineering (GATE)*
- 2018 Received **scholarship** for Google India Challenge Scholarship for the Android Basics track.
- 2011 Secured **144 state rank** in Math Olympiad(International Olympiad of Mathematics'11)

Work Experience

- **Tata Consultancy Services, Mumbai IN**   (*Jan'17 - July'18*)
  Designation: Assistant System Engineer
    - Automated the price updation functionality of products in Lotus Notes which reduced human efforts and error significantly.
    - *Involved in development of new functionalities in IBM WCS i.e. offline order entry by customer service representatives.*
    - Production support of IBMs sales center application, WCS and Lotus Notes application for the existing functionality.

Thesis and Projects

- **Asynchronous Consensus Protocol (MTech Thesis)**   (*May'18 - Ongoing*)
  Mentor: Prof Sandeep K. Shukla
    - Aim : To Implement Asynchronous Consensus Protocol in Hyperledger Fabric to increase the robustness of Blockchain.
    - Studied various consensus protocols and working on designing the algorithm for Asynchronous Protocol in Hyperledger.
- **Certificate Storage and Verification System**   (*Mar'19 Apr'19*)
  Mentor: Prof Sandeep K. Shukla , Tech Used: Hyperledger Composer, IPFS, Node Js, RESTful API
    - Implemented blockchain solution that allows users to publish, retrieve and verify the authenticity of documents.
    - *Developed a smart contract which prevent duplicate use of certificates. *
- **Loc Restro(Location based food ordering Application)**   (*Sept'18 Nov'18*)
  Mentor: Prof. T.V. Prabhakar, Tech Used: Ionic Framework, Mongo DB, Node Js
    - Developed the hybrid app that based on user's location shows nearby restaurants and allow user to place order.
    - Designed and implemented back-end of the system to be scalable, using Geo-location-based Load Balancing.
- **Exploitation and Defence of Computer Systems**   (*Feb'19 Mar'19*)
  Mentor: Prof. Pramod Subramanyan
    - **Securing Zoobar Server** Tech used: python, gdb
      Exploited vulnerabilities using control hijacking techniques like buffer overflow and format string attacks. Fixed security bugs in web server, implemented privilege separation and server-side sand-boxing of executable profiles in the okws server.
    - **En-crypted Storage System**, Tech Used: Go lang
      Designed and Developed a Key-Value store which ensured the integrity, confidentiality and secure sharing of data.

Technical Skills

- ***Programming Languages: C, C++, HTML, LaTeX, Python, Java
- ***Software and Libraries: Linux Shell Utilities, Git, Javascript , Android, MongoDB, Oracle SQL

Positions of Responsibility

- **Students' Senate Nominee, DPGC, IIT Kanpur**   (*Dec'18-present*)
    - Solved termination cases of 4 students with CPI less than the required CPI in the 1st year at Academic Senate
- **Teaching Assistant, IIT Kanpur**   (*Aug'18-Dec'18,Aug'19-present*)
    - Fundamentals of Computing, ESC 101 : Major duties involved helping students in hands on problem solving in C & grading.
    - Software Architecture, CS 654 : Major duties involved creation and grading of quizzes and assignments

Relevant Courses

o Analysis of Concurrent program   o Topics in Distributed Systems   o Computer Systems Security
o Introduction to Blockchain Technology   o Intro to Machine Learning   o Topics in Internet Technology

Extra-Curricular Activities

- 2015 Technical Team Member for Team AutoTreagon, Praticipated in Elite Karting, 2015 held in Bhopal, India
- 2013 and 2014 Trained around 50 students+ overhauling of Maruti 800 engine, single cylinder engine and carburetor
- *2013 Diploma holder in MCAD(Auto-cad) and pro-E from Mitsu CAD Education Society.*