Deepak Yadav
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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 Secured **99.52** percentile 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 update functionality of products in Lotus Notes which saved around 30 hours of work per update.
  – Involved in the development of new functionality that allowed offline order entry by Customer Sales Representative in IBM WebSphere Commerce, which improved customer satisfaction.

Thesis and Projects

- **Asynchronous Consensus Protocol (M.Tech Thesis)**   (*May'18–Ongoing*)
  Mentor: Prof Sandeep K. Shukla
  – **Aim**: To Implement Asynchronous Consensus Protocol in Hyperledger Fabric to increase the robustness of Blockchain.
  – Working on designing and implementing the algorithm of Asynchronous Consensus Protocol for Hyperledger Fabric.
- **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, download, and verify the authenticity of documents.
  – Developed a feature using smart contracts logic which prevent duplicate use of certificates by a user.
- **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 back-end of hybrid app that based on user's location shows nearby restaurants and allow a user to place an 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.
  – **Encrypted Storage System**, Tech Used: Golang
    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, MySQL

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

- 2018 Secured **2nd position** among 32 students in system-research bootcamp held at IIT Kanpur.
- 2015 Technical Team Member for Team AutoTregoan, Participated 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