

K LAXMAN





ACADEMIC DETAILS

Year	Degree / Board	Institute	GPA / Marks(%)
2023	B.Tech and M.Tech in Computer Science & Engineering	Indian Institute of Technology Delhi	6.652
2018	CBSE	Jawahar Navodaya Vidyalaya	78.33
2016	CBSE	Jawahar Navodaya Vidyalaya	9.4

SCHOLASTIC ACHIEVEMENTS

- Secured Rank 35 in Kalinga Institute of Industrial Technology Entrance Examination in the year 2018.
- Secured Rank 41(Category) in Joint Entrance Examination (Advanced) 2018 among 1.1 million applicants.
- Jawahar Navodaya Vidyalaya (JNV) Scholarship Awardee: Attained 100% Fee Waiver from Grades 6 to 12.

IIT DELHI THESIS

Title: Borderless Table Recognition and Accessibility in PDF Files Git

Supervisor: Prof.BalaKrishnan

Description: Developed and implemented a solution that uses Layout Parser and MTL-TabNet for borderless table recognition and accessibility. Integrated the solution into the RAVI project which aims to improve reading accessibility for visually impaired. Gained experience in using docker, machine learning algorithms and Opency.

INTERNSHIPS

- Eamvey Technologies (Manoj Vamsee, June 2021- July 2021) : Web development, Learning management division Git
 - -Tweaked an LMS developed with MERN technologies to align with specified layout guidelines
 - -Redesigned the UI part of the Learning Management system web interface to add additional functionalities in the site
 - -Integrated a third-party payment gateway utilising API key with CMS(Complete Merchant Solutions) and associated buttons.

PROJECTS

- Real Time Driver Drowsiness Detection using an Embedded system Git (Prof.Vireshwar)(Semester I ,2022)
 - -Developed a working **prototype** on Raspberry pi for Driver drowsiness detection using python, OpenCV, Dlib.
 - -Improved the device's memory and computational efficiency, including CPU usage, load average time, and memory usage.
- Automated Crowdsourcing Image Descriptions(RAVI) Git
- (Prof.Balakrishnan)(Semester I,2022)
- -Developed tools for automatically converting inaccessible digital books into standard compliant EPUB Reader.
- -Created a web application for crowdsourcing image descriptions and integrated Image Description Adder UI with RAVI.
- -Integrated Azure Computer Vision API for image analysis and for one-line image understanding to improve accessibility.
- Implementation of Snapshotting API for Virtual Machines Git
- (Prof.Abhilash) (Semester II,2022)
- -Designed and implemented a snapshotting API for virtual machines, enabling backup, live migration, and disaster recovery. -Implemented deduplication functionality to save space while storing multiple VM snapshots.
- Airline Database management system Prototype using MYSQL Git (Prof.Maya ramnath)(Semester II,2021-22)
 - -Developed a dummy airline management system for storing and retrieving airplane, airport, and flight data of year 2017 -Implemented a userfriendly frontend using HTML&CSS,Python,Flask was used, PostgreSQL as guery processor.
- Traffic density estimation from multi-camera feeds Git
- (Prof. Rijurekha Sen)(Semester II,2020-21)
- Implemented program in C++ Language with OpenCV functionalities like camera angle correction, Queue and dynamic density estimation from traffic video in cc footage to extract channels and process multi-camera feeds
- Used Background Subtractor and Optical Flow to calculate Queue and Dynamic density of vehicles using OpenCV
- Large File Download Using multiple Parallel threads Git
- (Prof.Aaditeshwar)(Semester I,2020-21)
- Implemented a python program for downloading a file in chunks on multiple connections parallelized dynamically
- It is resilient to network disconnections and TCP connections were opened using socket programming
- Please visit my Github profile for other Projects ====> https://github.com/laxman824

TECHNICAL SKILLS

- Languages: Python, CPP, Java, C, HTML, CSS, JS, React, MYSQL, LaTeX, VHDL
- Software & Tools:-Docker, Npm, PhpMyadmin, ReactJs, Xilinx ISE, MYSQL Workbench, Eclipse IDE, VS code, OpenCV

TEACHING ASSISTANTSHIP

• Teaching Assistant, COL100: Mentoring- multi-disciplined class of 300+ students in Introduction to Computer Science.

EXTRA CURRICULAR ACTIVITIES

- Best Cadet Award, NCC IIT Delhi: Got Best Cadet Award in 50 members of the Institute team NCC Cadets.
- Vice-captain, Volleyball(Girnar hostel): Lead a team of 12 members to secure 2nd position in the Interhostel tournament.



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IIT COURSE

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B.Tech and M.Tech in Computer Science & Engineering Indian Institute of Technology Delhi 6.652

QUALIFYING EXAM

• Joint Entrance Examination (JEE) Advanced Rank: 41 (ST)

POSITIONS OF RESPONSIBILITY

Volleyball\ Vice-Captain Girnar, BHM (May, 2019 - April, 2020)

COURSES DONE

Intro. To Computer Science, Calculus, Data Structures And Algorithms, Discrete Mathematical Structur, Digital Logic & System Design, Data Structures And Algorithms, Linear Algebra & Diffe. Equa., Networks & System Security, Analysis & Design Of Algorithms, Intro. To Parallel & Dis. Pro., Computer Networks, Digital Logic & System Design, Principles Of Artificial Int., Ideation And Protoyping, Data Mining, Spl. Topics In Parallel Comp., Intro To Automata & Th. Of Co., Computer Architecture, Operating Systems, M.tech Project Parti, Minor Project, Virtualization & Cloud Comput., Adv. Topics In Embedded Comp., Logic For Computer Science, Special Topics In Web Based Computing, Programming Languages, M.tech Project Partii, Probability & Stochastic Pro., Numerical Algorithms