PAVAS GOYAL

ACADEMIC DETAILS

Year	Degree / Board	Institute	GPA /
---	B.Tech in Computer Science & Engineering	Indian Institute of Technology,	9.529
2018	CBSE	Rose Mary Convent School	93%
2016	ICSE	Malwa School Gidderbaha	94.2%

WORK EXPERIENCE

Intern at NOKIA, New Delhi:

- Designed and implemented a three way biometric authentication system for office employees which included face, fingerprint and voice recognition modules.
- Used DNN based approaches for preparing encodings for face in images, align them and authenticate individuals based on encoding distance scores.
- Used GMMs and UBMs to prepare models for voices of individuals and verify them based on different comparison metrics.
- Used Image processing techniques (normalization, gabor filter, thinning, binarization) for enhancing latent fingerprints, followed by minutiae extraction and matching of fingerprints using descriptors.

Intern Associate Technology at Flexiele, Gurgaon:

- Build a highly efficient resume parsing system with enhanced extraction of the data in the resume into a detailed json format curbing each and every attribute mentioned in the resume.
- Employed various NLP libraries like spacy, nltk, regex on the way to develop a robust parsing system.

Technical head at Acadmaze:

- Lead a team of 7 developers, Selected as regionalist at Entrepreneurship World Cup, and at iB Hubs start-up school. Visit Website - http://acadmaze.com

Project Member at Assistech Lab, IIT Delhi:

- Worked under Assistech Lab, IIT Delhi for the Project RAVI (Reading Assistant for Visually Impaired)

Member of Official Software Development Club, IIT Delhi:

- Member of the dev community, IIT Delhi.

SCHOLASTIC ACHIEVEMENTS

- **JEE(Advanced)** : Secured **All India Rank 90** among a total of 1.5 million students.
- **Kishore Vaigyanik Protsahan Yojana (KVPY) Scholar**: With an **All India Rank 337** was awarded fellowship funded by the Department of Science and Technology, Government of India.
- **Excellence in Semester-I** : Was among the top 7% amongst all freshers of the year.
- **Regional Mathematics Olympiad (RMO)** : Qualified for Regional Mathematics Olympiad ,the first round of mathematics contest leading to the prestigious International Mathematics Olympiad
- **National Standard Examination in Chemistry** : Qualified NSEC being top 1% in the country.

PROJECTS

- **ML based ranking system for recruitment** *(Nov, 2019 – April, 2020)* *Prof. Niladri Chatterjee, IIT Delhi*
  - Build a software which classify people on various attributes at intellectual as well as personal level provided by the recruiter and suggest the best candidates who should be hired.

- The system uses natural language processing to access data from all types of social or personal sources and then designs a complete assessment and matches it with the required attributes to select the best person using machine learning algorithms.

- Utilized Universal Sentence Encoder (Google) for semantic matching of the attributes with the resume data for incorporating context dependent scoring of attributes.

• **Android PC controller** *(April, 2020 – June, 2020)* *Dev-club, IIT Delhi*

- Designed a server(PC) client(controller) application for controlling PC via android/.

- Implemented TCP and UDB sockets for building wireless controlling and built efficient data packets to minimize the connection ping for a smooth game play while playing games on PC using the controller.

• **Conversion of Raster Tables Images**: *(May,2019 - July,2019)* *Prof. M. Balakrishnan, IIT Delhi*

- Used Image Processing tools to develop a system which extracted the table structure and data from raster images and rendered the same into the Accessible (HTML, XML) structured Tables.

- Implemented and optimized contour detection, canny edge detector, Hough Transform and other structure detection algorithms to achieved around 90% accuracy for text structure detection.

- Studied and optimised Tesseract (OCR) engine it to increase its accuracy in every type of text extraction.

• **Custom Linux Shell** *(Jan, 2020 – Feb, 2020)* *Prof. Kolin Paul, IIT Delhi*

- Designed and created a custom Linux Shell using C Language with support for various commands, redirection from files, forking and piping.

• **Digital Encryption/Decryption** *(Oct, 2019 – Nov, 2019)* *Prof. Anshul Kumar, IIT Delhi*

- Build hardware system for fast and highly secured encryption of text by designing more secure and concealed encryption algorithms.

• **Web based Platform for Academicians** *(Sept, 2018 - July, 2019)* *Prof. S C Gupta, IIT Delhi*

- Developed a web-based Platform with a user-friendly interface and also conceptualised and implemented the server-side system using express JS and NodeJS for handling client requests.

- Devised an efficient query system for advanced and power rich text search.

- Customised the server for Load Balancing and encryption for security management of data.

TECHNICAL SKILLS

• **Programming** : Python, Java, VHDL, C++,C , NodeJS, HTML, CSS, Javascript .

• **Software & Tools** : Android Studio, OpenCV, Xilinx ISE, Vivado design suite, AutoDesk Inventor, Unity, Amazon Web Services

RELEVANT COURSES

• **Offline Courses :** Data Structures and Algorithms , Discrete Mathematical Structures , Probability Stochastic Processes , Digital Logic System Design, Introduction to Algorithms and Computing, Applications of Calculus, Linear Algebra , Theory of Differential Equations, Thermodynamics , Electromagnetic Waves and Quantum Mechanics, Programming Languages, Computer Architecture, Signals and Systems.

• **Online Courses :** Machine Learning with Python(Course era), Introduction to Deep Learning (Course era).

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Homepage - https://pavasgdb.github.io/homepage/

Github - https://github.com/pavasgdb/