JANGILI POOJITHA | 21CE31015

B.Tech.(Hons.) in CIVIL ENGINEERING and M.Tech. in STRUCTURAL ENGINEERING

EDUCATION

Year	Degree/Exam	Institute	CGPA/Marks
2026	M.TECH Dual Degree 5Y	IIT Kharagpur	8.53 / 10
2021	Intermediate Public Examination	TSWRS/Jr.College(G), Gowlidoddi, Ranga Reddy	97%
2019	Secondary School Examination	TS SWRCE, Algunoor, Karimnagar	10 / 10

INTERNSHIPS AND PROJECTS

Weather Application | Weather API   [May 2024]
- Developed and deployed a weather app using **Node.js**, **weather API** to provide real time weather updates for cities across the globe
- Integrated weather API to fetch data based on provided address, used **asynchronous** operations to handle **API requests** and **responses**
- Utilised **Express.js** for building **web server**, handling **HTTP requests**, provided static file serving using middleware for CSS, JavaScript
- Implemented **error handling** for API requests, input validation, **Handlebars**(hbs) **templating engine**, to render dynamic HTML templates

Backend Inventory Management System | Node.js   [October 2023]
- Developed an inventory management system using **Node.js** and **MongoDB** to efficiently track and manage items and transactions
- Implemented **REST API endpoints** to facilitate **CRUD** operations for items including ID, name, description, quantity, updated timestamp
- Recorded **transactions** (IN/OUT) with validation for item quantities, time, used **Express-validator** to validate **data** ensuring **integrity**
- Implemented REST API endpoints using **Express.js** to interact, integrated **error handling** to deliver appropriate **HTTP responses**

Portfolio Website | Website Development   [Jun'23 - Jul'23]
- Developed a **responsive** and visually appealing portfolio website using HTML, CSS and JavaScript with **user-friendly interface**
- Created multiple **web pages** including Home, About, Projects, Competitions, and Achievements, ensuring **cross-browser compatibility**
- Implemented **responsive design** using **media queries**, **flexible layouts** to ensure optimal viewing experience across different **viewports**
- Used **GitHub** for **version control** and deployment of the website, added interactive **buttons** and **navigation bar** for all pages of website

Traffic Accidents | Time-Series Forecast | Seasonal Autoregressive Integrated Moving Average model   [Mar'23 - Apr'23]
- Developed and implemented a **SARIMA** model to forecast traffic accidents of a location using **Python,** enhancing transportation safety
- Preprocessed data, utilised libraries such as **Statsmodels** for data analysis, **visualisation** and applied advanced statistical modelling
- Performed **Augmented Dickey-Fuller test** to check **stationarity** based on hypothesis of no unit root existence, obtained stationary
- Utilised **Auto-Correlation**(ACF) and **Partial Auto-correlation**(PACF) plots to determine **order** of model and improve forecasting accuracy

Smart Stick for the Visually Impaired | NeoVision   [May'22 - Jun'22]
- Designed a Smart Stick to assist visually impaired by **alerting** to **obstacles** and **water** hazards through **auditory** and **sensory** signals
- Programmed code on **Arduino IDE**, designed circuit using **TinkerCAD** and assembled stick with **Breadboard, Sensors, Arduino Uno R3**
- Integrated **Ultrasonic Distance Sensors HC SR 04** and **Vibration** motors to detect the distance between the user and obstacle

SKILLS AND EXPERTISE

- **Languages:** C++, Data Structures & Algorithms, OOPs, Python, JavaScript, HTML, CSS, MongoDB, React, Node.js, Express.js, SQL
- **Softwares/Tools:** MS Office, MS Excel, MS Word, VS Code, Git, Github, Google Colab, Postman, Matlab, Staad Pro, AutoCAD
- **Libraries:** Standard Template Library(STL), Numpy, Pandas, Matplotlib, Seaborn, Scikit-Learn, Tensorflow, Keras, PyTorch

AWARDS AND ACHIEVEMENTS

- Recipient of prestigious **MCM scholarship** awarded by the Government of India based on continuous academic excellence and merit
- Received the **'Best Player of the Athletics Team'** and **'Athletics Excellence Award'** at IIT Kharagpur for academic year 2023-24
- Secured **National Rank 8** in **Millennium National Scholarship Examination,** conducted by Millenium Examination Council, 2012
- Bagged **All India Rank 379** and **State Rank 78** in **National Mathematics Indian Talent** competition, conducted by **AMTI,** 2015-16

COURSEWORK INFORMATION

- **Civil Engineering:** Basic Engineering Mechanics | Solid Mechanics | Structural Analysis | Theory of Elasticity | RC Structure* | Steel Structures | Matrix Structural Analysis | Structural Modelling and Simulation* | Geomatics* | Hydraulics* | Pavement | Transportation* | Water and Wastewater* | Analysis, Design of Geotechnical Systems* | Coastal Hydrodynamics | Finite Element Analysis
- **Others:** Programming and Data Structures* | Mastering Algorithms, Udemy | Node.js Developer, Udemy | Probability and Statistics | Advanced Calculus | Linear Algebra | Basic Electronics* | Economics | Introduction to Sociology   *-courses with laboratory part

POSITIONS OF RESPONSIBILITY

Captain | Institute Athletics Team | IIT Kharagpur   [Nov'23 - Present]
- Spearheaded team of 50+ athletes in **3** months summer camp, overseeing 170+ practice sessions, resulting **30%** increase in team strength
- Secured **Overall Gold** in Men, Women in **57th Inter-IIT sports** meet conducted at IIT Indore further exemplifying team excellence
- Coordinated with coach, managed team of **52** athletes in **Inter IIT** camp, won **General Championship** in 56th Inter IIT, IIT Gandhinagar
- Planned and administered an **INR 1.2 M** budget for management of 52 athletes across multiple tournaments and outstations
- Achieved overall **Gold** at Parakram Sports Fest conducted by IIT Dhanbad, showcasing exceptional **leadership**, **team** performance

EXTRA CURRICULAR ACTIVITIES

- Set the new **Inter IIT meet record** of 4:23.14 minutes in 4 x 400m relay in the 57th Inter IIT sports meet 2024 hosted by IIT Indore
- Represented IIT Kharagpur, won **Gold** and 2 **bronze** medals in 800m and 4 x 400m relay in **71st, 72nd West Bengal State Meet** - 2023, 24
- Bagged a **Gold** and **3 Silver** medals in 800m, 1500m respectively, in the **56th and 57th Inter IIT** sports meet 2023 and 2024
- Participated in **National Level** in event of 400m, in 16th **National Inter District Junior Athletics Meet**, organised by AFI, 2018
- Received **3 Best Female Athlete Awards** in East India's Largest Sports Festival,IIT Dhanbad and **Inter Hall** Competitions, IIT Kharagpur
- Secured a total of **33 medals** in various athletics events conducted in **Inter IIT, Inter Hall, Open IIT** and **Out station** competitions