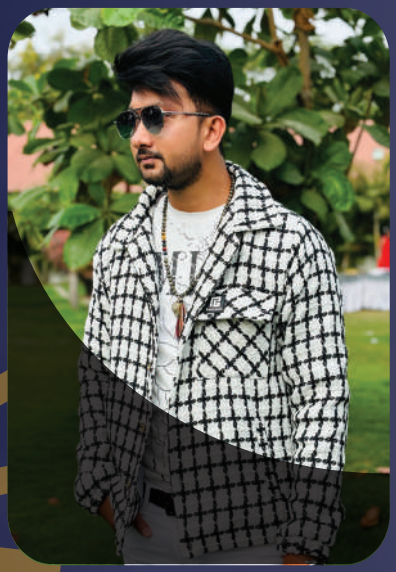

ARC
TECHNOLOGIES
&INSTITUTIONS
Embrace The Moment To
Empower Your CAREER Journey
INTERPRET
YOUR
DREAMS
PROSPECT
Revolutionizing the Education Standards
with Affordable and Quality Teaching

ARC TECHNOLOGIES &INSTITUTIONS

About Us

At Arc Technologies and Institutions, we believe that exceptional education should be accessible to all. Since our inception in 2015, we have been dedicated to bridging the gap between learning and real-world application through innovative and affordable IT training solutions.

We are not just an educational institution—we are your gateway to the future of technology. Our team of seasoned experts and industry professionals are passionate about nurturing talent and fostering growth in the ever-evolving IT landscape.



Vicky Gawande

CEO & Founder

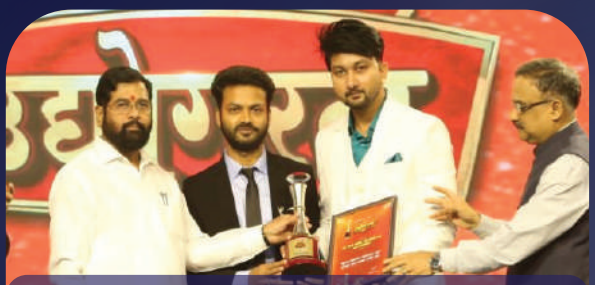
He is a Google Certified Data Analyst , Professional Forex Trader , FullStack Developer, an Investment Banker and Trainer with more than 10 years of experience. His multifaceted skill set and extensive experience have been instrumental in driving the success and innovation at ARC Technologies & Institutions.

Goldy Sahu

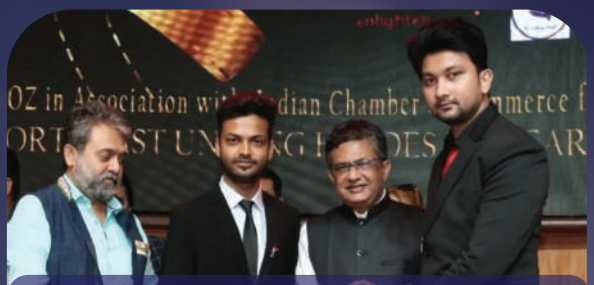
Director

He is the Director of ARC with over 8 years of experience in Java and Android development. His expertise in these areas has helped him lead and complete many successful projects. Goldy is known for his ability to solve complex technical problems and work well with his team. He stays updated with the latest industry trends, which helps him guide ARC effectively.

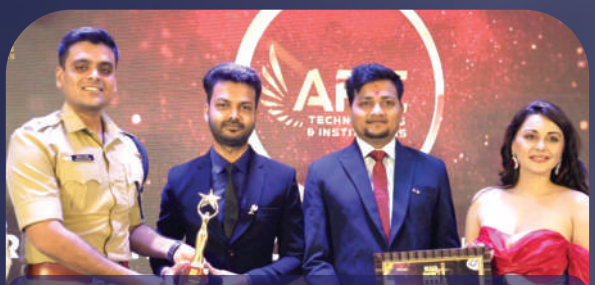
Our Achievements



Arc Technologies and Institutions has been Awarded with " The Best Technical Training Institute of Maharashtra " By Hon. Chief Minister of Maharashtra Shri. Eknath Shinde at Mumbai

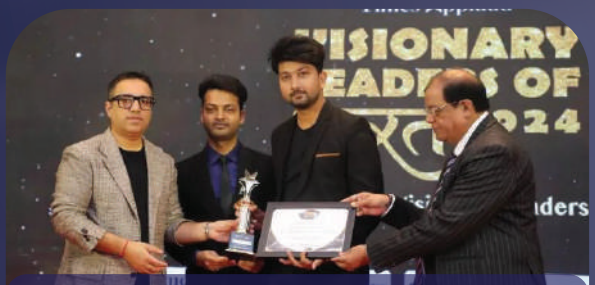


Arc Technologies and Institution recognized as Best Training Institute by Bombay Stock Exchange



Arc Technologies and Institutions has been honored as the "Best Training Institution of Nagpur". This prestigious award was presented by Shri Niketan Kadam, the Deputy Commissioner of Nagpur Police.

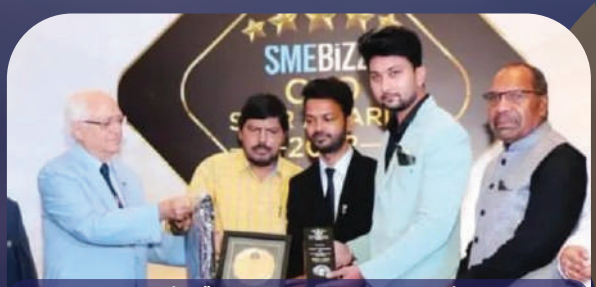
Arc Technologies and Institutions wins Mid-day Icons award for affordable, top quality IT education



A moment of pride as we're awarded the Best Training Institution in Maharashtra by the esteemed Ashneer Grover!

Arc Technologies and Institutions Has been Honoured With " The Best Training Institution of Maharashtra " By Honourable Governor Of Maharashtra Shri. Ramesh Bais at Raj Bhavan, Mumbai.

Delighted to share that, I've been honored with " Entrepreneur of the Year" award by Hon. Governor of Maharashtra Shri Bhagat Singh Koshyari at Raj Bhavan (Mumbai)



Honoured With " The Best CEO In Education Industry " by the Hands of Hon. Ramdas Athawale Sir (Minister of State for Social Justice and Empowerment) at New Delhi.

Java Full Stack Syllabus

ARC TECHNOLOGIES & INSTITUTIONS

Week 1-2: Introduction to Web Development

- Day 1-3: Overview of Web Development
  - Basics of web development
  - Roles of frontend and backend engineers
- Day 4-5: Introduction to HTML
  - HTML syntax, tags, and elements
  - Creating basic web pages

Week 3-4: Styling with CSS and Bootstrap

- Day 1-3: Introduction to CSS
  - CSS syntax, selectors, and properties
  - CSS layout techniques
- Day 4-5: Bootstrap Basics
  - Responsive design with Bootstrap
  - Bootstrap components and grid system

Week 5-6: Introduction to JavaScript

- Day 1-3: JavaScript Basics
  - Syntax, variables, data types, and operators
  - Control flow and loops
- Day 4-5: DOM Manipulation
  - Manipulating the DOM
  - Updating HTML content and styles dynamically

Week 7-8: Advanced JavaScript and ES6+

- Day 1-3: ES6 Features
  - Arrow functions, template literals, destructuring
  - Classes and modules
- Day 4-5: Asynchronous JavaScript
  - Promises and async/await
  - Fetch API for making HTTP requests

Week 9-10: Introduction to Java

- Day 1-3: Java Basics
  - Syntax, variables, data types, and operators
  - Control flow and loops
- Day 4-5: Object-Oriented Programming (OOP)
  - Classes, objects, inheritance, and polymorphism

Week 11-12: Advanced Java Concepts

- Day 1-3: Collections Framework
  - Lists, sets, maps, and iterators
- Day 4-5: Exception Handling and File I/O
  - Try-catch blocks, custom exceptions
  - Reading and writing files

Java Full Stack Syllabus

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Week 13-14: Introduction to Spring Framework

- Day 1-3: Spring Core
  - Inversion of Control (IoC) and Dependency Injection (DI)
  - Spring beans and configuration
- Day 4-5: Spring Boot
  - Creating Spring Boot applications
  - Spring Boot annotations and auto-configuration

Week 15-16: Spring MVC and RESTful Services

- Day 1-3: Spring MVC
  - Building web applications with Spring MVC
  - Handling form submissions
- Day 4-5: RESTful Web Services
  - Creating REST APIs with Spring Boot
  - Handling HTTP methods and responses

Week 17-18: Database Integration with Hibernate and JPA

- Day 1-3: Introduction to Hibernate
  - ORM concepts and Hibernate configuration
  - Entity mappings and relationships
- Day 4-5: Spring Data JPA
  - Integrating Spring Boot with JPA
  - Repository pattern and CRUD operations

Week 19-20: Frontend Frameworks and Tools

- Day 1-3: Introduction to Angular
  - Angular components, modules, and services
  - Data binding and dependency injection in Angular
- Day 4-5: Building Single Page Applications (SPAs)
  - Routing and navigation in Angular
  - Integrating Angular with REST APIs

Week 21-22: Security and Authentication

- Day 1-3: Spring Security
  - Configuring Spring Security for web applications
  - Authentication and authorization mechanisms
- Day 4-5: JWT and OAuth2
  - Implementing JWT for stateless authentication
  - Introduction to OAuth2 and securing API

Week 23-24: Deployment and Cloud Services

- Day 1-3: Deployment with Heroku and AWS
  - Deploying Spring Boot applications to Heroku
  - Introduction to AWS services (EC2, S3, RDS)
- Day 4-5: Continuous Integration/Continuous Deployment (CI/CD)
  - Setting up CI/CD pipelines with Jenkins
  - Automating deployments to cloud platforms

JavaFull Stack Syllabus

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Internship Program (3 Months)

Month 1: Orientation and Project Setup

- Week 1-2: Orientation
  - Project requirements, tools, and technologies
  - Development environment and version control with Git
- Week 3-4: Initial Project Setup
  - Setting up project repositories
  - Initial project planning and task allocation

Month 2: Implementation and Collaboration

- Week 1-2: Frontend Development
  - Implementing frontend features using Angular
  - Collaborating with UI/UX designers
- Week 3-4: Backend Development
  - Implementing backend features using Spring Boot and Hibernate
  - Integrating frontend with backend

Month 3: Deployment and Optimization

- Week 1-2: Deployment Preparation
  - Preparing the application for deployment
  - Setting up deployment pipelines
- Week 3: Deployment
  - Deploying the full-stack application to Heroku and AWS
  - Testing and troubleshooting deployment issues
- Week 4: Optimization and Presentation
  - Optimizing application performance and scalability
  - Preparing and delivering final project presentations
  - Receiving feedback and evaluations from mentors

Data Analytics and Data Scraping

ARC TECHNOLOGIES &INSTITUTIONS

Week 1-2: Introduction to Data Analytics and Data Scraping

- Day 1-3: Introduction to Data Analytics
  - Learn basic concepts and importance of data analytics.
  - Explore various applications of data analytics in different industries.
- Day 4-5: Introduction to Web Scraping
  - Understand the basics of web scraping.
  - Learn how to extract data from websites using libraries like Beautiful Soup in Python.

Week 3-4: Foundational Data Skills and SQL

- Day 1-3: Introduction to SQL
  - Understand fundamental SQL queries and database manipulation.
- Day 4-5: Data Cleaning and Preprocessing
  - Learn techniques for cleaning and preprocessing data using Excel.

Week 5-6: Exploratory Data Analysis (EDA)

- Day 1-3: Introduction to Python for Data Analysis
  - Learn basics of Python programming language.
  - Introduction to Python libraries like Pandas for data manipulation.
- Day 4-5: Exploratory Data Analysis (EDA) in Python
  - Apply Python libraries (Pandas, Matplotlib, Seaborn) for EDA.

Week 7-8: Statistical Analysis and Advanced Data Manipulation

- Day 1-3: Introduction to Statistics
  - Understand basic statistical concepts such as mean, median, mode, standard deviation.
- Day 4-5: Statistical Analysis in Python
  - Apply statistical methods using Python libraries (Scipy, Statsmodels).

Week 9-10: Machine Learning Fundamentals

- Day 1-3: Introduction to Machine Learning
  - Learn basic concepts and types of machine learning algorithms.
- Day 4-5: Introduction to Scikit-learn
  - Learn how to implement machine learning algorithms in Python using Scikit-learn.

Week 11-12: Advanced Data Manipulation and Data Visualization

- Day 1-3: Advanced Data Manipulation in Python
  - Master advanced data manipulation techniques using Pandas.
- Day 4-5: Data Visualization with Plotly and Tableau
  - Learn advanced data visualization techniques

Data Analytics and Data Scraping

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Week 13-14: Power BI Desktop and Data Visualization

- Day 1-3: Introduction to Power BI Desktop
  - Creating basic visualizations and reports.
  - Using DAX (Data Analysis Expressions) for data manipulation.
- Day 4-5: Advanced Power BI Desktop
  - Advanced data visualization techniques.
  - Best practices for report design and performance optimization.

Week 15-16: Power BI Service and Mobile

- Day 1-3: Power BI Service
  - Publishing and sharing reports on Power BI Service.
  - Collaborating with team members using Power BI Service.
- Day 4-5: Power BI Mobile
  - Accessing and interacting with reports on Power BI Mobile.

Week 17-18: Advanced Power BI Topics

- Day 1-3: Advanced Topics in Power BI
  - Advanced data modeling and relationships.
  - Custom visualizations and third-party integrations.
- Day 4-5: Best Practices and Performance Optimization
  - Techniques for optimizing Power BI performance.
  - Best practices for data modeling and report design.

Week 19-20: Excel for Data Analytics

- Day 1-3: Excel Basics and Essential Formulas
  - Introduction to Excel interface and basic functionalities.
  - Key formulas and functions for data analysis.
- Day 4-5: Data Tools and Charts in Excel
  - Using data tools: sorting, filtering, and conditional formatting.
  - Creating charts and visualizations.

Week 21-22: Advanced Excel Features and Dashboards

- Day 1-3: Advanced Excel Features
  - PivotTables and PivotCharts.
  - Data validation and protection.
- Day 4-5: Excel Data Management and Dashboards
  - Managing large datasets.
  - Creating interactive dashboards

Week 23-24: SQL Advanced Functions and Python for Data Analytics

- Day 1-3: Advanced SQL Functions
  - String functions, mathematical functions, date-time functions.
  - Implementing window functions.
- Day 4-5: Python for Data Analytics
  - Basics of Jupyter Notebook.
  - List and tuples manipulation.

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Week 25-26: Data Preprocessing and Linear Regression

- Day 1-3: Data Preprocessing
  - Data cleaning and transformation techniques.
  - Preparing data for machine learning models.
- Day 4-5: Linear Regression
  - Understanding linear regression.
  - Implementing linear regression in Python.

Week 27-28: Data Visualization and Dashboards

- Day 1-3: Creating Data Visualizations in Excel and Python
  - Advanced charts and visualizations in Excel.
  - Data visualization libraries in Python (Matplotlib, Seaborn).
- Day 4-5: Creating Interactive Dashboards
  - Using Power BI and Tableau to create interactive dashboards.

Week 29-30: Comprehensive Project and Review

- Day 1-3: Capstone Project
  - Integrating all learned skills into a comprehensive project.
  - Data collection, cleaning, analysis, and visualization.
- Day 4-5: Review and Presentation
  - Final review of key concepts.
  - Presenting the capstone project

Data Analytics and Data Scraping

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Internship Program (3 Months)

Month 1: Orientation and Project Assignments

- Week 1-2: Orientation
  - Familiarization with project requirements, tools, and technologies.
  - Setting up the development environment and version control with Git.
- Week 3-4: Initial Project Assignments
  - Defining project scope and objectives.
  - Data collection and initial cleaning

Month 2: Implementation and Collaboration

- Week 1-2: Data Analysis and Model Building
  - Conducting exploratory data analysis (EDA).
  - Building predictive models using machine learning techniques.
- Week 3-4: Collaboration and Feedback
  - Collaborating with mentors and team members on project tasks.
  - Iterating based on feedback

Month 3: Final Project and Presentation

- Week 1-2: Final Project Development
  - Applying all learned skills to develop the final project.
  - Ensuring the project meets all requirements and objectives.
- Week 3: Project Optimization
  - Optimizing project performance and scalability.
  - Finalizing project deliverables.
- Week 4: Presentation and Feedback
  - Preparing and delivering final project presentations.
  - Receiving feedback and evaluations from mentors.

MERN Stack Syllabus

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Week 1-2: Introduction to Web Development

- Day 1-3: Overview of Web Development
  - Basics of web development
  - Roles of frontend and backend engineers
- Day 4-5: Introduction to HTML
  - HTML syntax, tags, and elements
  - Creating basic web pages

Week 3-4: Styling with CSS and Bootstrap

- Day 1-3: Introduction to CSS
  - CSS syntax, selectors, and properties
  - CSS layout techniques
- Day 4-5: Bootstrap Basics
  - Responsive design with Bootstrap
  - Bootstrap components and grid system

Week 5-6: Introduction to JavaScript

- Day 1-3: JavaScript Basics
  - Syntax, variables, data types, and operators
  - Control flow and loops
- Day 4-5: DOM Manipulation
  - Manipulating the DOM
  - Updating HTML content and styles dynamically

Week 7-8: Advanced JavaScript and ES6+

- Day 1-3: ES6 Features
  - Arrow functions, template literals, destructuring
  - Classes and modules
- Day 4-5: Asynchronous JavaScript
  - Promises and async/await
  - Fetch API for making HTTP requests

Week 9: Introduction to Full Stack Development and the MERN Stack

- Day 1-2: Overview of Full Stack Development
  - Full stack development concepts
  - Roles and responsibilities
- Day 3-5: What is the MERN Stack?
  - Introduction to MongoDB, Express.js, React, and Node.js
  - Benefits of using the MERN stack

Week 10: Prerequisites and Setting Up the Development Environment

- Day 1-2: Prerequisites
  - Basic understanding of HTML, CSS, and JavaScript
  - Familiarity with command line and version control (Git)
- Day 3-5: Setting Up the Development Environment
  - Installing Node.js and npm
  - Setting up a text editor (VSCode recommended)
  - Introduction to Git and GitHub
  - Installing MongoDB

MERN Stack Syllabus

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Week 11-12: MongoDB

- Day 1: Introduction to NoSQL Databases
- Day 2-3: MongoDB Basics
  - Collections and Documents
  - CRUD Operations
- Day 4-5: Advanced MongoDB
  - Indexing
  - Aggregation
  - Relationships
- Connecting MongoDB with Node.js
  - Using Mongoose for data modeling

Week 13-14: Express.js

- Day 1: Introduction to Express.js
  - What is Express.js?
  - Setting up an Express server
- Day 2-3: Routing in Express.js
  - Creating Routes
  - Route Parameters
  - Middleware
- Day 4: Handling Requests and Responses
- Day 5: Working with Middleware
  - Built-in Middleware
  - Third-party Middleware
  - Custom Middleware
- Building RESTful APIs
  - CRUD Operations with Express and MongoDB
- Error Handling in Express

Week 15-16: React.js

- Day 1: Introduction to React.js
  - What is React?
  - Setting up a React Project with Create React App
- Day 2-3: React Basics
  - Components and Props
  - State and Lifecycle
  - Event Handling
  - Conditional Rendering
- Day 4: Advanced React
  - Hooks (useState, useEffect, useContext)
  - Context API
  - React Router for SPA (Single Page Applications)
- Day 5: State Management
  - Redux
  - Context API with useReducer
- Connecting React with Backend
  - Fetch API
  - Axios
- Component Libraries and UI Frameworks
  - Material-UI
  - Bootstrap

MERN Stack Syllabus

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Week 17-18: Node.js

- Day 1: Introduction to Node.js
  - What is Node.js?
  - Node.js Modules
- Day 2-3: Asynchronous Programming in Node.js
  - Callbacks
  - Promises
  - Async/Await
- Day 4: File System Module
  - Reading and Writing Files
- Day 5: Working with npm
  - Installing and using packages
  - Creating custom scripts
- Building a Simple Server with Node.js
  - HTTP Module
  - Handling Requests and Responses

Week 19-20: Integrating the MERN Stack

- Day 1-2: Building a Full Stack Application
  - Setting up the project structure
- Day 3-4: Connecting Frontend and Backend
  - Creating RESTful API with Express
  - Fetching data from API in React
- Day 5: Authentication and Authorization
  - JWT (JSON Web Tokens)
  - Session Management

Week 21: Deployment

- Day 1-2: Deploying Backend to Heroku
- Day 3-4: Deploying Frontend to Netlify/Vercel
- Day 5: Environment Variables and Configuration

Week 22: Best Practices and Advanced Topics

- Day 1: Code Quality and Linting
  - ESLint
  - Prettier
- Day 2: Advanced Data Modeling
  - Schema Design
  - Validation and Sanitization
- Day 3: Security Best Practices
  - Protecting APIs
  - Securing User Data
- Day 4: Scalability
  - Horizontal vs Vertical Scaling
  - Load Balancing

Week 23-24: Final Project

- Day 1-3: Building a Complete MERN Stack Application from Scratch
- Day 4-5: Implementing Features Learned Throughout the Course
- Day 6-7: Deploying the Application

Data Science Syllabus

ARC TECHNOLOGIES &INSTITUTIONS

Month 1: Python Programming & SQL Basics

Week 1: Introduction to Data Science & Python Basics

- Day 1: Overview of Data Science, Introduction to Python and Jupyter Notebooks
- Day 2: Installing Python and Setting Up the Environment
- Day 3: Python Syntax and Basic Data Types (numbers, strings)
- Day 4: Variables and Basic Operations
- Day 5: Practice Session: Simple Python Programs
- Day 6: Conditional Statements (if, elif, else)
- Day 7: Loops (for, while)
- Day 8: List Comprehensions
- Day 9: Practice Session: Control Structures
- Day 10: Mini-Project: Building a Simple Calculator

Assignments: Python exercises and introductory projects
Reading: "Python for Data Analysis" by Wes McKinney (Chapters 1-3)

Week 2: Advanced Python for Data Science

- Day 11: Defining and Calling Functions
- Day 12: Function Arguments and Return Values
- Day 13: Lambda Functions
- Day 14: Modules and Packages
- Day 15: Practice Session: Writing Functions and Using Modules
- Day 16: Lists and Tuples
- Day 17: Dictionaries and Sets
- Day 18: Strings and String Operations
- Day 19: Practice Session: Working with Data Structures
- Day 20: Mini-Project: Data Processing Script

Assignments: Advanced Python exercises
Reading: Online resources for advanced Python topics

Week 3: Data Manipulation with Pandas

- Day 21: Reading and Writing Files
- Day 22: Working with CSV and JSON Files
- Day 23: Exception Handling
- Day 24: Practice Session: File Handling
- Day 25: Mini-Project: Log File Analyzer
- Day 26: Introduction to Pandas
- Day 27: DataFrames and Series Operations
- Day 28: Data Cleaning and Transformation
- Day 29: Practice Session: Data Manipulation with Pandas
- Day 30: Mini-Project: Data Cleaning and Transformation

Assignments: Data manipulation exercises using Pandas
Reading: "Python for Data Analysis" by Wes McKinney (Chapters 4-6)

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Week 4: Introduction to SQL

- Day 31: Basics of SQL Syntax
- Day 32: Querying Databases: SELECT, WHERE, JOIN
- Day 33: Aggregation Functions and GROUP BY
- Day 34: Practice Session: SQL Queries on Sample Databases
- Day 35: Mini-Project: SQL Queries
- Day 36: Complex Joins and Subqueries
- Day 37: Window Functions
- Day 38: Database Design and Normalization
- Day 39: Practice Session: Advanced SQL Queries and Database Design
- Day 40: Mini-Project: Database Design and Querying

Assignments: SQL queries on sample databases
Reading: "SQL for Data Scientists" by Renee M. P. Teate

Month 2: Data Visualization & Statistical Analysis

Week 5: Data Visualization with Matplotlib and Seaborn

- Day 41: Introduction to Matplotlib
- Day 42: Plotting Basic Graphs (Line, Bar, Histogram)
- Day 43: Introduction to Seaborn
- Day 44: Advanced Visualizations with Seaborn
- Day 45: Practice Session: Data Visualization Project

Assignments: Visualization projects using Matplotlib and Seaborn
Reading: Online tutorials for Matplotlib and Seaborn

Week 6: Introduction to Statistics for Data Science

- Day 46: Descriptive Statistics (Mean, Median, Mode, Variance)
- Day 47: Probability Distributions (Normal, Binomial)
- Day 48: Sampling and Central Limit Theorem
- Day 49: Practice Session: Statistical Analysis Exercises
- Day 50: Mini-Project: Statistical Analysis

Assignments: Statistical analysis exercises
Reading: "Practical Statistics for Data Scientists" by Peter Bruce & Andrew Bruce (Chapters 1-5)

Week 7: Inferential Statistics & Hypothesis Testing

- Day 51: Hypothesis Testing (t-tests, Chi-Square Tests)
- Day 52: Confidence Intervals
- Day 53: Correlation and Regression Analysis
- Day 54: Practice Session: Conduct Hypothesis Tests and Regression Analysis
- Day 55: Mini-Project: Hypothesis Testing
- Day 52: Confidence Intervals
- Day 53: Correlation and Regression Analysis
- Day 54: Practice Session: Conduct Hypothesis Tests and Regression Analysis
- Day 55: Mini-Project: Hypothesis Testing

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Week 8: SQL Advanced Topics

- Day 56: Complex Joins and Subqueries
- Day 57: Window Functions
- Day 58: Database Design and Normalization
- Day 59: Practice Session: Advanced SQL Queries
- Day 60: Mini-Project: Advanced SQL Queries and Database Design

Assignments: Advanced SQL queries and database design tasks
Reading: "SQL for Data Scientists" by Renee M. P. Teate (Chapters 6-10)

Month 3: Machine Learning Fundamentals

Week 9: Introduction to Machine Learning

- Day 61: Introduction to Machine Learning
- Day 62: Types of Machine Learning (Supervised, Unsupervised, Reinforcement Learning)
- Day 63: Basic Concepts (Features, Labels, Training, Testing)
- Day 64: Data Preprocessing (Handling Missing Values, Duplicates)
- Day 65: Practice Session: Data Preprocessing

Assignments: Build and evaluate basic machine learning models
Reading: "Introduction to Machine Learning with Python" by Andreas C. Müller & Sarah Guido (Chapters 1-4)

Week 10: Supervised Learning - Regression

- Day 66: Introduction to Regression
- Day 67: Simple Linear Regression
- Day 68: Multiple Linear Regression
- Day 69: Evaluation Metrics for Regression (MSE, RMSE, MAE)
- Day 70: Practice Session: Regression Models

Assignments: Implement and evaluate regression models
Reading: "Introduction to Machine Learning with Python" by Andreas C. Müller & Sarah Guido (Chapters 5-7)

Week 11: Supervised Learning - Classification

- Day 71: Introduction to Classification
- Day 72: Logistic Regression
- Day 73: Decision Trees
- Day 74: Random Forests
- Day 75: Evaluation Metrics for Classification (Accuracy, Precision, Recall, F1 Score)
- Day 76: Practice Session: Classification Models

Assignments: Implement classification models and evaluate their performance
Reading: "Introduction to Machine Learning with Python" by Andreas C. Müller & Sarah Guido (Chapters 8-10)

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Week 12: Unsupervised Learning

- Day 77: Introduction to Clustering
- Day 78: k-Means Clustering
- Day 79: Hierarchical Clustering
- Day 80: Dimensionality Reduction (PCA)
- Day 81: Practice Session: Unsupervised Learning Techniques

Assignments: Perform clustering and dimensionality reduction on datasets
Reading: "Hands-On Machine Learning with Scikit-Learn, Keras, and TensorFlow" by Aurélien Géron (Chapters 11-12)

Month 4: Deep Learning & Advanced Machine Learning

Week 13: Introduction to Deep Learning

- Day 82: Overview of Deep Learning
- Day 83: Neural Networks Basics
- Day 84: Activation Functions
- Day 85: Training Neural Networks (Forward and Backward Propagation)
- Day 86: Practice Session: Building a Simple Neural Network

Assignments: Build and train basic neural networks
Reading: "Deep Learning" by Ian Goodfellow et al. (Introduction and Basics)

Week 14: Convolutional Neural Networks (CNNs)

- Day 87: Introduction to CNNs
- Day 88: Convolution and Pooling Layers
- Day 89: Building a CNN with Keras
- Day 90: Transfer Learning
- Day 91: Practice Session: Implementing a CNN

Assignments: Build and experiment with CNNs using TensorFlow/Keras
Reading: "Deep Learning with Python" by François Chollet (Chapters 5-7)

Week 15: Recurrent Neural Networks (RNNs)

- Day 92: Introduction to RNNs
- Day 93: LSTM and GRU Networks
- Day 94: Building RNNs with Keras
- Day 95: Time Series Forecasting with RNNs
- Day 96: Practice Session: Implementing an RNN

Assignments: Build and train RNNs for sequence prediction tasks
Reading: "Deep Learning with Python" by François Chollet (Chapters 8-9)

Week 16: Advanced Machine Learning Techniques

- Day 97: Basics of Ensemble Methods (Boosting, Bagging)
- Day 98: Hyperparameter Tuning (Grid Search, Random Search)
- Day 99: Model Deployment and Performance Monitoring
- Day 100: Practice Session: Advanced Techniques

Assignments: Apply advanced techniques and deploy a model
Reading: "Hands-On Machine Learning with Scikit-Learn, Keras, and TensorFlow" by Aurélien Géron (Chapters 13-15)

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Month 5: Natural Language Processing (NLP)

Week 17: Introduction to NLP

- Day 101: Introduction to NLP
- Day 102: Text Preprocessing and Tokenization
- Day 103: Bag of Words and TF-IDF
- Day 104: Basic Text Classification
- Day 105: Practice Session: NLP Tasks

Assignments: Text classification and preprocessing tasks
Reading: "Natural Language Processing with Python" by Steven Bird et al. (Chapters 1-3)

Week 18: Advanced NLP Techniques

- Day 106: Named Entity Recognition (NER)
- Day 107: Sentiment Analysis
- Day 108: Topic Modeling with LDA
- Day 109: Practice Session: Advanced NLP Techniques

Assignments: Implement advanced NLP techniques on text data
Reading: "Natural Language Processing with Python" by Steven Bird et al. (Chapters 4-6)

Week 19: Word Embeddings and Transformers

- Day 110: Introduction to Word Embeddings (Word2Vec, GloVe)
- Day 111: Transformers and BERT
- Day 112: Fine-Tuning Pre-trained Models
- Day 113: Practice Session: Implementing Transformers

Assignments: Work with word embeddings and implement transformer-based models
Reading: "Deep Learning for Natural Language Processing" by Palash Goyal et al. (Chapters 1-3)

Week 20: NLP Project

- Day 114: End-to-End NLP Project
- Day 115: Data Preparation, Model Building, and Evaluation
- Day 116: Project Presentation and Report
- Day 117: Practice Session: NLP Project

Assignments: Complete an end-to-end NLP project
Reading: Review previous NLP readings and resources

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Month 6: Time Series Analysis & Capstone Project

Week 21: Time Series Analysis

- Day 118: Introduction to Time Series Analysis
- Day 119: Decomposition of Time Series
- Day 120: Forecasting Methods (ARIMA, SARIMA)
- Day 121: Practice Session: Time Series Analysis

Assignments: Build and evaluate forecasting models
Reading: "Practical Time Series Analysis" by Aileen Nielsen (Chapters 1-5)

Week 22: Advanced Time Series Techniques

- Day 122: Advanced Forecasting Methods
- Day 123: Handling Seasonality and Trends
- Day 124: Time Series with Machine Learning (e.g., LSTM)
- Day 125: Practice Session: Advanced Time Series Techniques

Assignments: Apply advanced techniques to time series data
Reading: "Hands-On Time Series Analysis with R" by R.A. Jason (relevant chapters)

Week 23: Capstone Project Preparation

- Day 126: Project Introduction and Data Collection
- Day 127: Data Preprocessing and Exploration
- Day 128: Problem Definition and Model Selection
- Day 129: Project Milestones and Timeline
- Day 130: Practice Session: Project Planning

Assignments: Prepare for the capstone project
Reading: Review all previous materials

Week 24: Capstone Project Completion and Review

- Day 131: Build and Refine Models
- Day 132: Project Reporting and Presentation
- Day 133: Peer Review and Feedback
- Day 134: Final Project Review
- Day 135: Preparing the Presentation
- Day 136: Presenting the Project
- Day 137: Feedback and Q&A
- Day 138: Course Summary and Future Directions

Assignments: Complete and present the capstone project
Reading: Reflect on course content and further learning paths

Software Testing Syllabus

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Month 1: Introduction to Software Testing Concepts

- Week 1:
  - Theoretical Overview on Testing
  - Software Development Life Cycle (SDLC)
- Week 2:
  - Software Testing Life Cycle (STLC)
  - Development Models: Waterfall
- Week 3:
  - Development Models: Spiral
  - Development Models: V-Model

Month 2: Test Skill Development

- Week 4:
  - Test-Driven Development (TDD) vs Behavior-Driven Development (BDD) vs Acceptance Test-Driven Development (ATDD)
- Week 5:
  - Different Types of Testing and Test Planning
  - Requirement Traceability Matrix (RTM)
- Week 6:
  - Test Design Techniques

Month 3: Agile Methodology

- Week 7:
  - Introduction to Agile and Scrum Framework
  - Using JIRA Software
- Week 8:
  - Scrum Events: Sprint Planning
  - Sprint Review
- Week 9:
  - Sprint Retrospective

Month 4: SQL for Testing

- Week 10:
  - Creating and Modifying Tables
- Week 11:
  - Inserting, Updating, and Deleting Data from Tables
- Week 12:
  - Retrieving Data from One or More Tables
- Week 13:
  - Filtering, Sorting Data, Grouping, and Aggregating

Software Testing Syllabus

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Month 5: Core Java Programming

- Week 14:
  - Data Types, Package, Class, Objects, Methods
- Week 15:
  - Conditional Programming and Loops
  - String Manipulation
- Week 16:
  - Exception Handling
  - Constructors, This and Super Keywords
- Week 17:
  - Arrays and Collections
- Week 18:
  - Object-Oriented Programming (OOP) Concepts: Polymorphism, Inheritance
- Week 19:
  - Object-Oriented Programming (OOP) Concepts: Abstraction, Encapsulation

Month 6: Advanced Testing Techniques

- Week 20:
  - Selenium WebDriver Architecture and Hierarchy
  - Eclipse Project Setup and Launching Browser
- Week 21:
  - Locating Web Elements Using Different Strategies
  - WebDriver and Web Element Methods
- Week 22:
  - Handling Browser Windows and Frames
  - Handling Alert Pop-Ups and Chrome Options
- Week 23:
  - Action Class: Mouse Usage and JavaScript Executor
  - Handling Dropdowns, Waits, Screenshots, and Calendars
- Week 24:
  - Version Control with Git and GitHub
  - Build Automation with Maven

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Month 7: Cucumber and API Testing

- **Week 25:**
  - **Writing Feature Files and Step Definitions in Cucumber**
  - **Implementing Tags**
- **Week 26:**
  - **Hooks: Pre and Post Conditions**
  - **Rerunning Failed Scenarios and Generating Reports**
  - **Framework Design**
- **Week 27:**
  - **API Testing Using Postman**
- **Week 28:**
  - **API Testing Using Rest Assured Automation**

Month 8: Interview Preparation and Final Project

- **Week 29:**
  - **Mock Interviews**
- **Week 30:**
  - **Situational Based Interview Questions**
  - **Project Work and Review**

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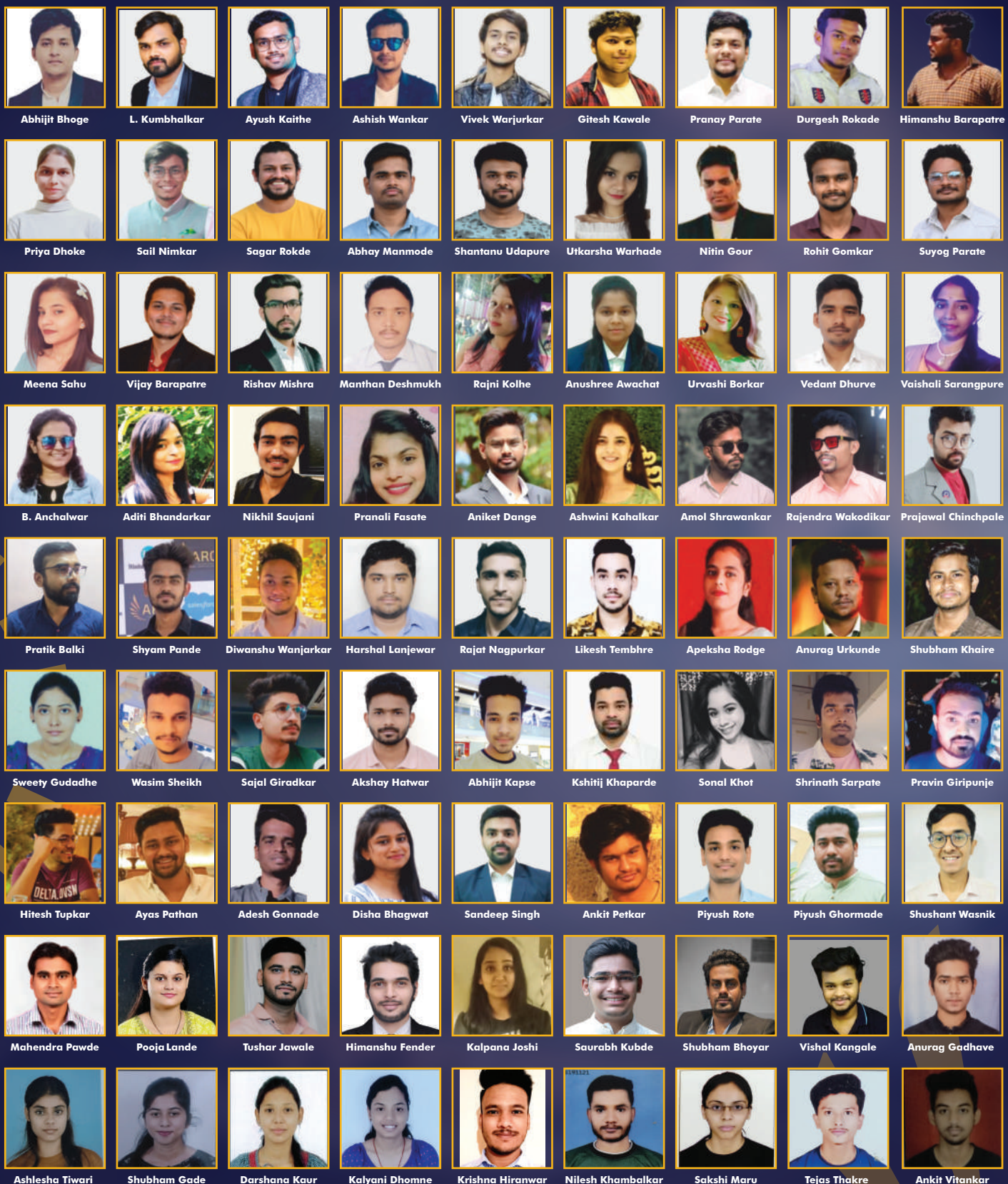
Our Placements



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Our Placements


Atulesh Thakre


Tejas Bhajbhuje


Shashank Narnaware


Adarsh Balvir


Aryan Ganeshkar


A. Chhaparghare


Pragati Parate


Shailesh Kale


Parag Katekhaye


Ruchika Ingle


Sachin Khadse


Jennifer Shendre


Samiksha Dohe


Jayesh Wankhede


Shubhangi Bhaisare


Kaustubh Virulkar


Rohit Gomkar


Jayshri Bajad


Harshit Desai


Vedant Vaidya


Aman Nanhe


Laxmi Rahangdale


Sanskruti Dharme


Pragati Raut


Suvarna Gaymukhe


Anushri Pohane


Kalyani Kherde


Shiwani Gomase


Prashant Bhajankar


Anuj Paunikar


Abhishek Bawankule


Siddhesh Ashtikar


Sanket Khobragade


Alkesh Gaigawali


Piyush Borkar


Priyanka Babhale


Tushar Kanojiya


Suryakant Paunikar


Harsha Gadigone


Nikhil Bujade

Uddesh Piprewar

Ritik Tupe

Motan Dodke

Yash Parate

Pranay Kukwas

KRUNAL REWADE

Akash Kamde

Priya Tambe

Ekta Navarati

M. Mohadikar

Sandesh Katre

Ankit Sonkusare

S. Ghormade

Shushant Nimgade

Damini Bawne

Rohini Nandekar

Achal Kharabe

Mayur Bhujade

Chaitanya Taywade

Shubham Nagrare

Yash Madankar

Snehal Choudhari

Arun Mandal

Rupali Kamdi

Kanchan Chute

Rutuja Changole

Rajat Rahangdale

Rohan Dhomne

Akin Dampalliwar

Oditya Katre

Manushka Gade

Vedant Vaidya

Minal Nimbone

Aniket Thakre

Kartik Katolkar

Umesh Rahangdale

Himanshu Rokade

Preeti Mohane

Monali Doye

Khushbu chaware

Mansi Dhenge

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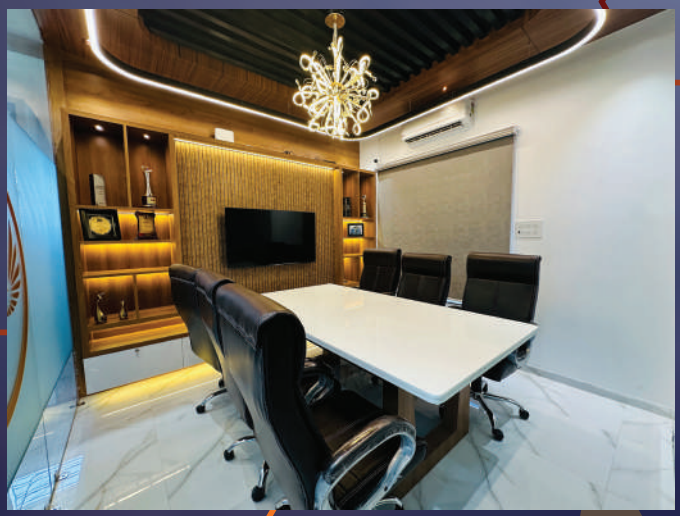
Tour of Our Branch



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SCAN FOR LOCATION