Kartik Vyas

B.Tech. Undergrad
Computer Science | IIT Jodhpur
Senior Tech Associate | Morgan Stanley

Mob. : +91 800 348 6067
Email : vyaskartik20@gmail.com
Website : vyaskartik20.github.io
GitHub : vyaskartik20 | LinkedIn : kartikvyas20 | YouTube : Kartik
CodeChef : dare20 | CodeForces : dare20 | HackerRank : murdock20

Skills

Competence
- Competitive Programming
- Mobile App Development
- Full Stack Software Development
- Machine Learning

Proficient
- Java • C • C++ • Spring Boot
- Apache Camel • Spring JDBC

Familiar
- Python • HTML • CSS
- JavaScript • TypeScript
- AWS Lambda • AWS S3 • Git
- DynamoDB • SQL • Docker
- Kafka • Zookeeper

Frameworks
- Angular • Bootstrap • Flask
- React Native • Keras • Pytorch

Others
- Content Writing
- Public Speaking

Education

IIT Jodhpur | B.Tech. - CSE
2022 | CGPA:8.23/10

Blue Heaven Vidyalaya
2018 | XII | Percentage: 88.0%

Seedling Modern High School
2016 | X | CGPA: 9.8

Relevant Courses

- Computer Programming
- Discrete Mathematics
- Data Structures and Algorithms
- Object Oriented Analysis and Design
- Software Engineering
- Theory of Computation
- Operating Systems
- Algorithm Design and Analysis
- Artificial Intelligence
- Database Systems
- Computer Networks
- Linear Algebra and Calculus
- Probability, Statistics and Random Processes

Achievements

- **JEE Advanced 2018**
  2929 Rank [top 0.2%]
- **Student Guide | Counselling Services | Jul 2019 - May 2020**
  Mentored 9 students
- CodeForces | **Expert** | 1714
- CodeChef | **4 Stars** | 1917
- CodeForces Global Round 10 | Rank 732/11678

Experience

Morgan Stanley | Senior Technology Associate | Dec 2022 - Ongoing
Fixed Income | Mar 2023 - Ongoing
- Solely developed Orchestration Layer between UI and backend apps
- Gathered requirements from business and designed **20+ REST APIs**
- Implemented services to fetch data for order creation and order status applications using **Java** and **Apache Camel**, reducing latency by **25%**
- Provided **KTs** and helped team in **Production deployment**

Unit Investment Trust | Technology Associate | Dec 2022 - Feb 2023
- Developed a synchronization tool to align the legacy and modern databases and enhanced data consistency by **5%**
- Built data services in UIT modern platforms using **Spring JDBC**
- Followed **agile practices**, part of design and business domain discussions and gave firm-wide presentation

Gen AI Hackathon | Jul 2023 - Aug 2023
- Devised a tool using **Python** and **OpenAI** that can provide solutions to a technical or business problem in **textual and diagram** formats
- Integrated the tool with Firm's inhouse architecture storehouse, boosting innovation by improving existing architectural blueprints

Morgan Stanley | Technology Analyst | Aug 2022 - Nov 2022
- Part of an intensive **3 month training program** to learn about major technologies used in MS and tech industry
- Created a simulation of Trading application involving use of **MQs, CPS , REST APIs along with Angular** based UI to perform trades, achieving top **10%** performance in project simulations among peers

Morgan Stanley | Summer Intern | May 2021 - Jul 2021
- Built **greenfield web application** used by 800+ Financial Advisors
- Enhanced operational efficiency by **15%** & improved client engagement
- Made responsive, compact, easy to use frontend screens using **Angular**
- Integrated Stored Procedures and APIs via **Spring Boot** & **Spring JDBC**, streamlining data processing and reducing processing time by **30%**

Projects

SEMANTIC PLAGIARISM | GitHub | Demo
B.Tech Project | Nov 2020 - Apr 2021 | Mentor: Dr. Romi Banerjee
- Formulated a comprehensive plagiarism detection tool by integrating semantic analysis capabilities, improving accuracy by **5%**
- Generated **binary classification**, **multi-class classification** and **regression** models using **Pytorch** and **Keras**
- Launched a **React** and **Flask** based webpage for user friendly access

AUTOMATIC ANSWER GRADER | GitHub | Demo
B.Tech Project | Jan 2020 - Apr 2020 | Mentor: Dr. Anand Mishra
- Developed grading algorithms aided by **OpenCV** library achieving **97%** accuracy
- Engineered robust backend using **Flask** API and hosted it on **AWS EC2**
- Built a cross platform **mobile app** using **React Native** to grade OMRs

VID - STREAM AND DATABASE | GitHub | Demo
Course Project for Computer Networks and Database Systems |
Dec 2020 - Feb 2021 | Mentors: Dr. Ravi Bhandari and Dr. Romi Banerjee
- Architected a real time **video streaming** over a local network and saving streamed video on devices which can be shared later.
- Conditional Peer to Peer direct File transfer using **Python Sockets**

TIME SERIES ANALYSIS | GitHub | Report
B.Tech Project | Jul 2021 - Dec 2021 | Mentor: Dr. Gaurav Harit
- Anamoly Detection using **LSTM Autoencoder model** with 95% accuracy
- Single and Multi step Time Series Prediction using **LSTM** and **CNN-LSTM Encoder Decoder** models