

Pankaj Kumar

pankajkumar130697@gmail.com | LinkedIn | Github | Website | +91 9453994875

EDUCATION

DUAL DEGREE, IIT KANPUR

MAJOR IN, MATHEMATICS & STATISTICS

MINOR IN, COMPUTER SCIENCE

CPI - 9.3/10 | 2015 - 2020

COURSEWORK

COMPUTER SCIENCE

Data Mining

Machine Learning

Artificial Intelligence

Principles Of Database Systems

Data Structures and Algorithms

STATISTICS

Non-Linear Regression

Bayesian Analysis

Applied Stochastic Processes

Probability and Statistics

Linear Algebra

Ordinary Differential Equations

Partial Differential Equations

SKILLS

PROGRAMMING

Languages

• Java • C/C++ • Python

Frameworks & Libraries

• Spring Boot • Drop Wizard

Databases

• MySQL • MongoDB

• Influx DB • Redis

Message Queues

• Kafka • SQS • Rabbit MQ

AWS

• Route 53 • ECR • EC2 • S3

• Lambda fn • Cloud Watch

Deployment

• CI/CD • Jenkins

• Docker • Kubernetes

• Git • GitHub Actions

Tools

• Junit • Mockito • Maven

• JPA • Hibernate

OTHER SKILLS

• System Design • OOP

• Grafana, Newrelic

EXPERIENCE

CLEARTAX | SOFTWARE ENGINEER | BANGALORE, INDIA

Aug 2020 - Oct 2022 | GST Team

- Developed an E2E **indirect tax filing platform** to handle the traffic of **100k** monthly transactions. Streamlined tax compliance processes, reduced errors, and improved accuracy, resulting in a positive impact for businesses.
- Experienced with all the stages of software development cycle by Agile method, from planning to design, coding, testing, deployment and configuring metrics.
- Refactored legacy code using **Design Patterns & Solid Principles**, reduced latency by **25%** by removing deprecated API calls, **optimized** various db queries.
- Developed a **licensing and metering service** to enforce the purchasing and renewal of licenses, which reduces instances of unauthorized use by **40%**
- Led, designed, and implemented micro-services which are highly **scalable**.
- Integrated **Govt APIs**, established **integration test** and **CI/CD** pipeline, configured monitoring tools like **metrics, alarms, logging, and dashboards**.
- Improved the **on-call** process by hosting training sessions, providing retools, and automating various processes which decreases ticket velocity by **30%**.
- **Tech Used:** JAVA | SpringBoot | Junit | Kafka, SQS | Jenkins | AWS services | Docker, Kubernetes | MySQL, MongoDB, InfluxDB, Redis | Vault | Grafana

PROJECTS

TAXI FARE PREDICTION | REPORT, PROF. FAIZ AHMED

May 2019 - July 2019 | IIT Kanpur, India

- Designed model which predicts fare on various factors, with optimal accuracy
- Performed EDA on data using data visualization tools and techniques
- Employed Linear regression, Lasso, Random Forest and Artificial Neural Network models on the pre-processed data
- Model predicted fare with error $\pm 5\%$ compared to actual fare predictor device

FAKE NEWS DETECTION | REPORT, PROF. ARNAB BHATTACHARYA

Jan 2019 - May 2019 | IIT Kanpur, India

- Designed model to classify articles as real or fake and act as a filter for articles
- Performed pre-processing, tokenization, word stemming to convert text documents into features vector using NLTK
- Used feature set as a body text, title, body + title, and applied Logit, Naïve Bayes, ANN, and Support vector machine for classification
- Compared results obtained from different classification technique, out of which SVM gave an average accuracy of 93%

ACHIEVEMENTS

- **Spot Award Winner:** For exemplary work done in licensing service project
- **Academic Excellence:** Received A* grade for exceptional performance in various courses in undergrad and postgrad

VOLUNTEER EXPERIENCE

- Mentored fresh graduate in programming, mathematics behind ML models, career advice, coding interview prep, professional portfolio
- **Numerical Computations:** Taken doubt clearing session, designed and reviewed programming assignments for the course consisting of 100+ students.