

Pankaj Kumar

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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

SKILLS

PROGRAMMING

Languages

• Java • Go • Python • C/C++

Frameworks & Libraries

• Spring Boot • Flask

Databases

• MySQL • Postgres

• MongoDB • Redis

• Influx DB

Message Queues

• Kafka • SQS • Rabbit MQ

AWS

• Route 53 • ECR • EC2 • S3

• Lambda fn • Cloud Watch

Deployment

• CI/CD • Jenkins • Celery

• Docker • Kubernetes

• Git • GitHub Actions

Tools

• Maven • Bazel

• Junit • Mockito • Pytest

• JPA • Hibernate • SQLAlchemy

• gRPC, HTTP

• System Design

• Grafana, Newrelic, Retool

EXPERIENCE

OCROLUS | SOFTWARE ENGINEER | GURGAON, INDIA

Remote | Mar 2023 - Oct 2023 | Detect Team

- Developed a **Detect service** that revolutionizing the lending industry. Empowering clients to detect suspicious documents seamlessly, it enables confident lending decisions and prevents the approval of fraudulent applications. Currently this service handles over **50k documents** per day.
- Implemented a **cron job** using Celery for regular deletion of unverified/unsupported docs, preventing potential misuse of database.
- Engineered an innovative **migration service**, empowering fraud analysts to test new signals on production data for unparalleled precision, data clean up and release of new functionality without any disruption to the client experience.
- Successfully resolved the challenges related to SQS by seamlessly transitioning to Kafka. This strategic move enhanced reliability and scalability in messaging.
- Implemented a generic workflow using **Solid Principles & OOPs concept** to generate signals and visualization for different kind of docs like paystub, bs
- **Tech Used:** Python, Go | Flask | Pytest | Kafka, SQS | Postgres, Redis | Grafana

CLEARTAX | SOFTWARE ENGINEER | BANGALORE, INDIA

Remote | Aug 2020 - Dec 2022 | GST Team

- Developed an E2E **indirect tax filing platform** capable of handling a monthly txn volume of 100k. Streamlined tax compliance processes, resulting in reduced errors, improved accuracy, and significant benefits for businesses and govt
- Proficient in all stages of the software development cycle using **Agile methodology**, from planning and design to coding, testing, deployment.
- Successfully refactored legacy code using **Design Patterns & Solid Principles**, resulting in a **25%** reduction in latency by eliminating deprecated API calls, **optimizing** various db queries, implemented IP address based rate limiting
- Created a **licensing and metering service** to enforce license purchases and renewals, effectively reducing instances of unauthorized use by **40%**
- 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, resulting in a **30%** decrease in ticket velocity.
- **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

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