# DHANANJAY PATIL

#### (+91) 942 302 6654 | Pune, India | <u>dhananjay.pict@gmail.com</u> | <u>LinkedIn</u> | <u>LeetCode</u>

## SKILLS

#### Programming Languages: JavaScript, Python, TypeScript, Bash

**Database Technologies:** MySQL, DynamoDB, PostgreSQL, Cassandra, MongoDB, ElasticSearch **Technical Skills:** NodeJs, ExpressJs, Flask, NestJs, React, TypeORM, Sequelize, Chai/Mocha, Jest **Tools:** Terraform, Kibana(ELK), Ethereum(Web3), Docker, RabbitMQ, AWS, GCP, Camunda, Git **Methodologies:** Microservice Architecture, REST, Serverless, Agile/XP, SAFe, Test-driven Development

## WORK EXPERIENCE

Globant - Pune, IN Senior Software Engineer July 21 – Present

#### Project #1: Console Connect - Billing Platform (Client: PCCW Global)

- Define the Overall Architecture and design of Billing and Subscription Platform including business logic and database model. Also Conceptualized Low Level Design, Coding and Unit / Integration Testing of software.
- Collaborated with Client on a regular basis for requirement gathering/feedback on modules developed.
- Performed Code reviews, guide, and mentor junior developers, taking an active role in assessing how processes such as deployment and testing can be optimized and improved.
- Responsible for handling & managing all phases of design, development & technical implementation.
- Suggested new feature enhancements to existing modules/new project proposals.
- Technologies used: NestJs, Camunda, TypeScript, Docker, React, Jest, PostgreSQL, MongoDB

#### Project #2: Generic UI Design System (Client: Deloitte)

- Designed and implemented essential functional components using **React** & **MaterialUI** such as Modal, Calendar, SearchBar, Tabs which can be reused across other applications.
- Undertake full responsibility to integrate and also maintain our application with Deloitte's **Concourse** CI/CD pipeline and **SonarQube** test framework, ensuring robust code quality and extensive test coverage.
- Independently developed of a comprehensive multi-package setup for our application, enabling seamless exporting and flawless utilization by other Deloitte teams.
- **Technologies used:** ReactJS, SonarQube, Jest, ConcourseCI, MaterialUI, Webpack

#### Project #3: Catalyst - Connected Constructions PoC (Client: Deloitte)

- Defined architecture & design of workforce & resource management solution platform to optimize the time and physical resources of partner construction companies.
- Introduced the Python SQLAIchemy and Alembic database migration framework to seamlessly handle the data model changes, while concurrently developing comprehensive unit and integration tests using the Pytest testing framework for the APIs.
- Conducted comprehensive code reviews to validate adherence to coding standards and guidelines, while actively contributing to critical system design and database architecture deliberations.
- **Technologies used:** Python, Flask, SQLite, PyTest, SQLAlchemy, Swagger, React

#### CasaOne - Bangalore, IN

Software Engineer

- Part of the Warehouse, Inventory, and Operations Management Engineering Team. Worked on Low Level Design, Coding and Unit testing/Integration Testing of software applications.
- Independently handled end-to-end development right from requirement analysis, validating UI designs, creating DB Designs, API development, unit testing, and deployment.

Nov 20 – Jul 21

# DHANANJAY PATIL

#### (+91) 942 302 6654 | Pune, India | <u>dhananjay.pict@gmail.com</u> | <u>LinkedIn</u> | <u>LeetCode</u>

- Integrated <u>DispatchTrack</u> (a Last Mile Logistics Service) with CasaOne Ecosystem leveraging Adapter Design patterns and Microservice architecture.
- Worked on **Admin Dashboard** an application for Inventory & Catalog Management
- Created and managed different services exercising event-driven architecture and Pub-Sub Pattern
- $\circ$  Practiced test-driven development methodologies using the **Mocha/Chai** test framework
- Deployed connection pooling and caching to optimize the filters with a sort approach that reduced the average API response time from 9-13 sec to 1-1.8 sec.
- **Technologies used:** NodeJs, ReactJs, PostgreSQL, ELK Stack, Events (AWS SQS-SNS), Terraform

#### TrueSparrow Systems - Pune, IN

Jun 18 – Nov 20

Software Engineer - Backend

#### Project #1: Moxie Studios

- Contributed to the development of an online fitness platform from scratch, actively involved in its end-to-end creation as Senior Backend Developer.
- Integrated **OAuth2.0** for Facebook and Instagram Connect, driving seamless new user signups. This impacted enhanced user experience using streamlined social media authentication.
- Worked on browser video recording and media compression using the **FFMPEG** library
- Created a real-time, in-browser chat application utilizing **WebSockets** technology, leveraging the Node socket.io library for seamless communication, and integrating **RabbitMQ** for efficient message handling.
- Led the design and implementation of a robust **Cassandra** database solution, efficiently storing and managing vast volumes of user settings, reactions, and messages. Oversaw the entire lifecycle of the Cassandra implementation, including architecture design, data modeling, and deployment.
- Wrote generic API parameter sanitization and **validation layer** of application
- **Technologies Used:** NodeJs, ExpressJs, MySQL, Cassandra, Amazon SES, AWS Lambda, Redis, RabbitMQ, Push Notifications, Socket.IO, etc.

#### Project #2: Pepo

- It was a Cryptocurrency-based social media mobile app where all the user interactions were tracked as transactions on the Ethereum
- Wrote a generic notification framework for emails using AWS SES service and for push/in-app notifications using Google FCM
- Actively participated in open source project: <u>OST Caching Layer</u> which was an NPM cache library containing 3 caching engines: Memcached, Redis and In-Process
- Developed scripts to optimize performance monitoring, error handling, and recovery mechanisms for backend services, ensuring seamless and dependable operation of vital systems.
- **Technologies Used:** NodeJs, ExpressJs, MySQL, Cassandra, Memcached, Amazon SES, RabbitMQ, Push Notifications, Socket.IO, etc.

#### Project #3: OST Platform

- It was a revolutionary platform for scaling the **Ethereum** with custom-made auxiliary chain contracts. Worked as a Backend Engineer in the team who developed the REST API interaction layer with Blockchains.
- Encountered and overcame various challenges in production like callback hell, Range exceptions, Async complexities & complex process handling.
- Significantly enhanced open-source projects: <u>OST Block Scanner</u> and <u>OST View</u>, by delivering substantial and impactful contributions.
- Improved performance by using database sharding, parallel processing & connection pooling.
- **Technologies Used:** NodeJs, ExpressJs, Web3JS, MySQL, DynamoDB, Github, RabbitMQ, etc.

# DHANANJAY PATIL

#### (+91) 942 302 6654 | Pune, India | <u>dhananjay.pict@gmail.com</u> | <u>LinkedIn</u> | <u>LeetCode</u>

#### Espressif Systems - Pune, IN

Project Intern

- The senior year project, sponsored by the Semiconductor Industry Leaders Espressif, demonstrated the ability to connect and control limited-range Bluetooth devices remotely using serverless instances
- Integrated MQTT-based **Eclipse Paho** client with ESP32 microcontrollers through **AWS IoT**. The successful prototypal solution validated the feasibility of this approach.
- **Technologies used:** ESP32 Micro Controller, AWS Lambda, AWS IoT, API Gateway, Python, Eclipse Paho MQTT, etc.

# **COURSES & CERTIFICATIONS**

- → AWS Certified Solutions Architect Associate (SAA-CO2)
- → AWS Certified Database Specialty (**DBS-C01**)

# **EDUCATION**

# Narsee Monjee Institute of Management Studies (NMIMS), Mumbai Aug 22 - May 24 Distance MDA in Information Technology and Custome Management (ITCM) CD1 0.2

Distance MBA in Information Technology and Systems Management (ITSM)GPA 8.2Coursework: Big data and Business Analytics, IT Security and Infra Management, Cloud Computing

### Pune Institute of Computer Technology, Pune

Bachelor of Computer Engineering

Aug 14 - May 18

GPA 8.8

Coursework: Data Structures, Algorithms, Database Systems, Software Engineering, Operating Systems

Sept 17 – June 18