



Piyush Pathak

E-Mail: piyushpat89@gmail.com * Mobile: +91 9560092098 * Linked in: www.linkedin.com/in/piyush-pathak-a2a69196

Summary

Infrastructure operations and capital planning leader, energised by constrained optimisation problems, known for re-engineering processes rather than out-spending them; gazetted officer of the Indian Railway Service of Engineers (All India Rank 2, UPSC ESE 2015). Over a decade delivering large-scale projects (greenfield and brownfield), under ecological and budgetary constraints, spanning operational turnaround, capacity expansion, bridge and asset renewal, and station redevelopment, with deep command of contracts, capital allocation and centre-to-state negotiation. MIT-trained in data analytics and supply chain analytics.

Professional Experience

Senior Divisional Engineer and Divisional Engineer, Track and Infrastructure | Indian Railways, Northern Railway, Moradabad | September 2022 to Present

- Operational turnaround: raised mainline speed on an 84 km section of the critical Najibabad to Saharanpur route by redesigning 55 curves and rebuilding track structure, cutting critical track geometry defects 91% in 12 months and improving the section quality index from 92 to a near perfect 99 through mechanized maintenance, without added expenditure.
- Capacity expansion: remodeled Rishikesh yard to handle full-length trains, increasing capacity from 18 to 24 coaches at a civil cost of just INR 4.5 crore, and upgraded a further section to full speed in 2 months by converting 13 yard turnouts to heavier rail.
- Capital planning and feasibility: authored master plans and techno-feasibility studies converting 2 major stations to full-length capacity, secured sanction for a Gati Shakti cargo terminal, and prepared a costed land transfer proposal to monetize prime railway land.
- Project delivery under regulatory constraint: commissioned an electronic interlocking system and built an impact dissipator tunnel against boulder fall inside the Rajaji Tiger Reserve, within strict forest authority and single-line operational restrictions.
- Adept at renewal of assets at scale: renewed a phenomenal 1,019 bridge sleepers against a target of 500, deep-screened and distressed 89 km against a target of 70, and reconditioned 159 switches and crossings against a target of 60, delivering a division-wide safety upgrade on girder bridges.

Assistant Divisional Engineer | Indian Railways, Northern Railway, Varanasi | February 2018 to May 2022

- Capacity improvement: eliminated 7 decades-old speed restrictions across the Varanasi corridor, raising permissible speeds and saving up to 10.7 minutes per train on a line carrying 54 million gross tonnes annually, sustained through the pandemic with near-daily track possession.
- Critical path compression: rebuilt a double-track mainline bridge in a single 6-hour possession against an original 16-hour, 4-block plan, a 60% time compression achieved by resequencing, and launched 10 slabs over 4 steel girders at a major station in one 4-hour block with zero traffic detention.
- Safety and quality: eliminated all wooden sleepers from the section, including renewing 1,881 steel channel sleepers and over 2 km of guard rail on a major bridge with zero missing fittings.
- Mechanization: executed the first systematic deep screening of the entire Varanasi to Mughalsarai mainline using 4 ballast cleaning machines simultaneously on a corridor interchanging between two zonal railways.
- Stakeholder coordination: cleared 8,500 square metres of long-entrenched encroachment across defence, state, police and paramilitary authorities, unblocking stalled third and fourth line expansion.
- Recognition: Divisional Railway Manager Individual Award, 2021 to 2022, for meritorious service.

Operations Officer | Hindustan Petroleum Corporation Limited, Raipur | December 2012 to August 2013

- Logistics operations: managed petroleum rake turnaround and truck loading operations and implemented loss monitoring systems that reduced pilferage at a major distribution terminal.

Accomplishments

- **National selection to the Indian Railway Service of Engineers**

All India Rank 2, Engineering Services Examination 2015, Union Public Service Commission (UPSC).

- **Principal Chief Engineer Award, 2024**

For efficiency improvement by speed raising after removing infrastructure bottlenecks through methodical and mechanized maintenance.

- **Divisional Railway Manager Individual Award, 2021 to 2022**

Individual award for meritorious service.

- **Scholarship to IIM Ahmedabad**

Admitted on a 25% scholarship to the PGPM programme, Indian Institute of Management, Ahmedabad.

Education

Bachelor of Technology, Civil Engineering | JSS Academy of Technical Education, Gautam Buddh Technical University, Noida | 2011

Certifications

- MicroMasters Certificate in Data, Economics and Design of Policy, Massachusetts Institute of Technology (MIT), 2023 – taught and awarded by Economist Jonathan Gruber and Nobel Laureates in Economics Esther Duflo and Abhijeet Banerjee – With following key certificates earned : Data Analysis for Social Scientists, Microeconomics, Designing and Running Randomized Evaluations, Developments in Global Poverty
- Supply Chain Analytics, Massachusetts Institute of Technology (MIT), 2023.

Extra-Curriculars

- Multiple prizes and accolades in music (instrumentals and performance) from 1998 to 2011, including the international COFAS competition 2005.
- Performed on invitation at the Commonwealth Youth Festival, New Delhi, 2010.
- Silver medal, badminton doubles, Indian Railway Service of Engineers probationer tournament.

Functions List

- Project & Program Management
- Operations & Supply Chain
- Public Policy, Infrastructure Planning and Strategy

Sectors List

- Government & PSUs
- Real Estate & Infrastructure
- Transportation and Logistics