## VISHNU KUMAR

#### Portfolio

Date of Birth: 23rd April 1991 From: Samastipur (Bihar), India

## 1 Professional Experience

### 1.1 Larsen and Toubro Ltd. (PT and D IC)

## Assistant Manager - QA/QC Electrical

May 2018 - Present

# 1.1.1 RDSS - Valsad, Gujarat

May 2024 - Present

- Conversion of overhead 11kV line to underground cable.
- Conversion of overhead 11kV line to overhead MVCC.
- Conversion of bare LT conductor to LT AB cable.
- Bifurcation of load with new 11kV DTR.

## 1.1.2 KRCL-03, Tunnels T3 and T5 (E and M)

November 2020 - April 2024

- Supply, erection, testing, and commissioning of 33kV and 11kV HT power cable network.
- Supply, erection, testing, and commissioning of GIS Substation.
- Supply, erection, testing, and commissioning of DG sets.
- Supply, erection, testing, and commissioning of tunnel ventilation system.
- Supply, erection, testing, and commissioning of tunnel lighting.
- Supply, erection, testing, and commissioning of SCADA system.
- Supply, erection, testing, and commissioning of fire fighting system.
- Location: Tunnel T-3 and T-5, Katra-Dharam section, USBRL Project.

## 1.1.3 Saubhagya Project

May 2018 - October 2020

- Electrification of rural and urban poor households.
- Augmentation of 33/11 kV Substations.
- LT AB cable installation to prevent theft.

## 1.2 Vindhya Telelinks Limited

November 2017 - April 2018

- Installation of separate 11kV feeder, DTR, and LT line for agriculture.
- Augmentation of distribution transformer, 11kV, and LT lines under DDUGY 12th Plan and IPDS.

### 1.3 KEI Industries Limited

June 2017 - October 2017

• Installation of 11kV feeder, DTR, LT line, and BPL kit under RGGVY 12th Plan.

# 1.4 Punj Lloyd Limited

April 2016 - May 2017

• 11kV feeder, DTR, LT line installation, and BPL kit connection under DDUGJY 12th Plan.

#### 1.5 GNG Limited

August 2013 - November 2015

- HT Independent Feeder (66/11 kV) to Main Boosting Station, Faridabad JNNURM Project.
- REC Quality Monitoring Engineer Tier II (Jammu and Kashmir).
- RGGVY 11th Plan Madhya Pradesh.

# 2 Key Skills and Responsibilities

- Quality Assurance and Quality Control.
- Internal Auditor ISO 9001:2015 (Certified Green Belt).
- Preparation of Method Statements, FQAP, PQP, MQP.
- Conducting internal audits and monthly review meetings.
- Material inspection at vendor premises as per GTP.
- Customer requirement implementation and process monitoring.
- Training facilitation and Kaizen implementation.
- Risk identification and mitigation planning.
- Best practice documentation.

## 3 Technical Skills

## 3.1 Web Development

• Frontend: HTML, CSS, JavaScript.

• Backend: Node.js, Express.js, MongoDB.

• Web Hosting: Amazon AWS.

## 3.2 AI and Machine Learning

- Creating and deploying LLM-based RAG apps using Streamlit and FastAPI.
- Working on LLM fine-tuning and Transformer-based model development.

## 3.3 Video Editing

- Adobe Premiere Pro and After Effects.
- Editing, enhancing, and exporting for multiple platforms.

# 4 Software and AI Engineering Experience

- Programming Languages: Proficient in Python, JavaScript, HTML, CSS. Experienced in building full-stack applications with modern web technologies.
- Blockchain and Smart Contracts: Developed smart contracts using Solidity on Ethereum-compatible blockchains. Implemented decentralized logic for web3 applications.
- Machine Learning and Deep Learning:
  - Built end-to-end ML pipelines for classification and regression tasks using Scikit-learn and XGBoost.
  - Designed and trained deep learning models using TensorFlow and PyTorch.
  - Applied Convolutional Neural Networks (CNNs) for image classification and pattern recognition tasks.
  - Explored Transformer-based models with a deep understanding of self-attention mechanisms.

## • Generative AI:

- Developed applications using large language models (LLMs).
- Integrated OpenAI and Google Gemini APIs into web apps for content generation, summarization, and content creation.
- RAG (Retrieval-Augmented Generation):
  - Designed and deployed RAG-based systems combining vector search (ChromaDB, FAISS) with LLMs for contextual Q and A.
  - Built apps that retrieve relevant documents from PDF/URL sources and pass them to transformers for query-based generation.
- Fine-Tuning Transformers:
  - Fine-tuned pre-trained transformer models on domain-specific datasets for improved accuracy in NLP tasks.

# 5 Recognitions

- Quality Award Winner 2022-2023 L&T Construction.
- Quality Trophy Runner-Up 2022-2023 L&T Construction (PT&D IC).

# 6 Educational Qualifications

- B.Tech in Electrical Engineering, West Bengal University of Technology, Siliguri Institute of Technology (Techno India Group), 7.7 DGPA, 2013.
- 12th, Holy Mission High School (Bihar), C.B.S.E, 71.8 percent, 2008.
- 10th, Holy Mission High School (Bihar), C.B.S.E, 72.4 percent, 2006.