

# Shivraj Anand

Computer Science Graduate (B.Tech. 2021–2025)

**Contact:** 8092776242      **Email:** shivrajanand022002@gmail.com      **Location:** Ranchi, India  
**Linkedin:** linkedin.com/in/shivrajanand      **Github:** github.com/shivrajanand      **Portfolio:** shivrajanand.github.io

## Profile

Recent Computer Science Engineering graduate (B.Tech. 2021–2025) with a CGPA of 8.78 (till 7th semester; final result awaited). Skilled in Python, machine learning, NLP, and data analytics with hands-on experience through 9+ end-to-end projects. GATE CS'24, CS'25, and DA'25 qualified. Actively contributed to coding and startup communities on campus. Currently exploring NLP research, especially in language models and deep learning. Eager to contribute to impactful roles in data science, ML, or software development.

## Areas of Expertise

• Python Programming • Machine Learning • Natural Language Processing (NLP) • Data Analysis • Visualization • Deep Learning • PyTorch • Scikit-learn • Transformers • Web Development (HTML, CSS, JavaScript, React, Flutter, Django) • Git • GitHub • Algorithm Design • Problem Solving • Research • Technical Writing

## Education

**B.Tech in Computer Science and Engineering** 2021–2025

B.P.M.C.E., Madhepura — CGPA: 8.78 (till 7th sem)

Relevant Subjects: Data Structures & Algorithms, DBMS, ML, NLP, OS, Computer Networks

Achievements: Branch Topper in 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> year; GATE'24 CS, GATE'25 CS, DA Qualified

**Higher Secondary Certificate (12<sup>th</sup> Grade)** 2018–2020

Kendriya Vidyalaya, Jamalpur — 94.4%

Subjects: Physics, Chemistry, Mathematics, Computer Science

Achievements: 2<sup>nd</sup> rank in school in 12<sup>th</sup> board exams

**Secondary Certificate (10<sup>th</sup> Grade)** 2017–2018

Kendriya Vidyalaya, Jamalpur — 90%

Subjects: General Science, Math, English, Social Science, Hindi

Achievements: 2<sup>nd</sup> rank in school board exams

## Projects [View all](#)

- **NLLB Finetuning for Sanskrit-Hindi Translation** — NLP (B.Tech. Major Project) [\[Github\]](#) [\[Blog\]](#)
  - Using model nllb-200-distilled-600M large parallel corpus of sanskrit-hindi dataset, from Gitapress, consisting of 16,330 training sentence pairs.
  - Attempting to improve Sanskrit-Hindi translation accuracy over existing models (e.g., NLLB, mT5, mBART, IndicTrans2), which currently show limited performance on this language pair.
  - Under supervision of Prof. Sujeet Kumar.
  - Got a BLEU score of 11 and CHRF++ score of 37 compared to models like mt5, Mbart for which scores are less than 1 in zero-shot-environment.
  - Tech-Stack: Transformer, HuggingFace, NLLB, mT5.
- **Autocorrect System** — NLP, Language/Channel Models (B.Tech. Minor Project) [\[Blog\]](#) [\[Kaggle\]](#)
  - Implemented spelling correction using probabilistic models for text decoding.
  - Tech-Stack: Pandas, Numpy, Re, Spacy.
- **Next Word Recommender System** — NLP (2024) [\[Blog\]](#) [\[Kaggle\]](#)
  - Built a next-word prediction engine using bigram and trigram probabilistic models.

- Tech-Stack: Pandas, Numpy, Re, Spacy.
- **Machine Learning Course Website** — HTML, CSS, JavaScript (2024) [\[LIVE\]](#)
  - Designed and deployed a beginner-friendly machine learning tutorial website.
  - Covered concepts like supervised learning, regression, and classification through blog-style lessons.
  - Tech-Stack: HTML, CSS, JS
- **Housing Sales Data Analysis** — Machine Learning (May 2023) [\[Kaggle\]](#)
  - Performed data preprocessing, visualization, and model building on housing datasets.
  - Tech-Stack: Pandas, Numpy, Scikit-learn, Seaborn .
- **Smart Task Manager** — Python, Tkinter, GUI [\[Github\]](#)
  - A desktop-based task management system built with Python and Tkinter.
  - Tech-Stack: Tkinter, Python, GUI
- **Random Password Generator** — HTML, CSS, JavaScript [\[LIVE\]](#)
  - Web app that generates passwords using randomness derived from the Collatz Conjecture.
  - Tech-Stack: HTML, CSS, JS
- **Cognifyz Data Science Internship Project** — Python, Pandas, Matplotlib [\[LIVE\]](#)
  - This repository contains the complete solutions to the tasks assigned during my internship at Cognifyz Technologies under the Data Science Internship Program.
  - Through this internship, I gained hands-on experience in data preprocessing, analysis, visualization, and predictive modeling using real-world data
  - Tech-stack : Python 3.10.11, Pandas, Numpy, Matplotlib, Seaborn e, Geoplot.

## Professional Experience

---

### Student Representative

*Startup Cell, BPMCE, Madhepura*

**Madhepura, Bihar**

*Oct 2023–May 2025*

- Helped plan and conduct 30+ startup events, workshops, and seminars to encourage entrepreneurship on campus.
- Directed logistics and communication with internal teams as well as external parties to facilitate the smooth flow of events.
- Created detailed records, documentation, and reports for Startup Cell operations in line with institutional objectives.
- Fostered innovation and startup culture among students through outreach and engagement efforts.
- Served as a bridge of communication between student entrepreneurs and Startup Cell leadership.
- Helped to maintain the Cell's social media and online communications.

### Data Science Intern

*Cognifyz Technologies*

**Remote**

*Mar 2025–Apr 2025*

- Performed data preprocessing and exploratory data analysis (EDA) on a real-world restaurant dataset to uncover trends in ratings, cuisines, and customer preferences.
- Built and evaluated machine learning models (e.g., regression/classification) to predict restaurant ratings or categorize establishments based on key attributes.
- Visualized insights using libraries like Matplotlib and Seaborn , creating clear dashboards and charts to communicate findings to both technical and non-technical audiences.
- View my work at Github Repo Link

## Online Courses & Certifications [View all](#)

---

- **Experience Certificate**

- Student Representative — Startup Cell, BPMCE (May 2025)

- **Natural Language Processing & Data Science**

- Natural Language Processing — Internshala (Mar 2025) — Scored 90%
- NLP Training Completion — NSDC (Mar 2025) — Grade: A
- Data Science Internship — Innovate Interns (Nov 2024 – Jan 2025)
- Data Science — Internshala (Ongoing)
- Machine Learning — Internshala (Mar–May 2023)

- **NPTEL & Core CS Subjects**

- Programming, DSA using Python — NPTEL (Jan–Mar 2024) — Top 2%
- Database Management Systems — NPTEL (Jul–Sep 2024) — Top 2%, Score: 79%

- **Programming Languages & Tools**

- C, C++, Java, Python — Spoken Tutorial (2023–2024)
- Programming in C and C++, DSA — Internshala (2023)

- **Cybersecurity & Systems**

- Introduction to Cybersecurity — Cisco (Apr 2023)
- NDG Linux Unhatched — Cisco (Jul 2023)

- **Other Certifications**

- Salesforce Developer Virtual Internship — Salesforce (Jan 2024)
- Digital Productivity — NIIT Foundation (Dec 2024)

## Skills

---

- **Programming Languages:** Python, C, C++, JavaScript
- **Web & App Development:** HTML, CSS, React.js, Flutter, Django
- **Machine Learning:** Scikit-learn, Pandas, Numpy, Matplotlib
- **NLP:** Transformers, SpaCy, Regex, PyTorch, Tensorflow
- **Data Visualization:** Power BI, Excel, Matplotlib, Seaborn
- **Tools:** Git, GitHub, Jupyter, Google Colab, VS Code
- **Soft Skills:** Communication, Teamwork, Event Management, Research Mindset

## Honors & Distinctions

---

GATE 2024 AIR 8532 • Top 2% in NPTEL DBMS & DSA • Branch Topper in B.Tech. (1st–3rd Year) • GATE 2025 AIR 4883(DA), AIR 8357(CS)

## Languages

---

- Hindi (Native), •English (Fluent)