Nikhil Choudhary

*Kolkata, West Bengal*

+91 8420205346 |[nikhil0653@gmail.com](mailto:nikhil0653@gmail.com) |[LinkedIn](https://www.linkedin.com/in/nikhil-choudhary-0653/) |[GitHub](https://github.com/NIKHIL0653)

# Education

**KIIT University** Bhubaneswar, India

*September 2021 – Present*  ***CGPA – 8.1***

# Skills

* **Languages**: C, C++, SQL, Git, Python, HTML, CSS, JavaScript, TypeScript
* **Frameworks**: OpenCV, TensorFlow, React, Tailwind, Hono
* **Developer Tools**: GitHub, VS Code, PyCharm, Jupyter Notebook, Docker
* **Libraries**: Keras, Pandas, NumPy, Matplotlib, Seaborn

# Work Experience

[**Artificial Intelligence Intern**](https://tinyurl.com/yc7vupp2) **|** [*Link*](https://github.com/NIKHIL0653/Bend-Detection-and-Image-Classification)*May 2024 - June 2024*

***TATA Steel –*** *Kolkata, India* ***Hybrid***

**Project Name :** Cut & Bent bend Detection and Image Classification

* Modernized a bend detection technique that accurately counted bends in Cut & Bent Rebar shapes using advanced computer vision, which **improved production efficiency**.
* Established a Deep Learning model utilizing convolutional neural networks for Rebar Image Classification, achieving a remarkable 95% accuracy rate in classifying unique Rebar cases across 4 main categories.
* **Consistently delivered** results ahead of schedule through strategic planning and strong co-ordination.

# Projects

**Car Tyre Condition Checking |** [*Link*](https://github.com/NIKHIL0653/AI_ML_DS/tree/6ea0a30b319a3121a05043e3ee52e2c3040b941a/CarTyreChecking) *December 2023 - March 2024*

***Tech Stack*** *– Python, OpenCV, NumPy, Pandas, Keras*

* Established a model that analyzes the condition of tyres using image processing along with contour detection and edge detection techniques to identify and analyze cracks in tyres.
* Developed and trained a Deep Learning Classification model to classify processed images into either bad Quality or Good Quality **alerting the driver to change tyres accordingly**

**Thoughts Blogging Website** *|* [*Link*](https://github.com/NIKHIL0653/Thoughts)*September 2024 - October 2024*

***Tech Stack –*** *TypeScript, React.js, Vite, Cloudflare Workers, Prisma, Zod, Aiven DB*

* Deployed a full-stack blogging platform that allows users to create an account and publish posts on the website that can be viewed by other users as well.
* Designed the Frontend using React.js with Tailwind CSS and Flow-bite components for styling and design consistency.
* Developed a backend system utilizing the Hono web framework and Cloudflare Workers to streamline server-less functions, achieving an average response time of under 200 milliseconds for user requests. Implemented **JWT token validation** for secure user authentication and session management.
* Integrated Aiven DB and Prisma Accelerate to host a robust PostgreSQL database, designed and managed **efficient NoSQL schemas** using that improved data storage efficiency by decreasing loading times to 50 milliseconds.

# Courses

* [**Deep Learning & CNNs from Scalar Academy**](https://moonshot.scaler.com/s/sl/8r8EGSk5Ys)*| Python, TensorFlow, Keras, CNN*
* [**100xDevs Cohort 2.0**](https://drive.google.com/file/d/1yniima_csD7ZHWanibeaCTgFdW393t_w/view?usp=sharing)*| HTML, CSS, JavaScript, React.js, Databases, Docker*