

# Prabin Nepal

<https://nepalprabin.github.io>

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## EDUCATION

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- **University of South Dakota** Vermillion, SD  
*Master of Science in Computer Science; GPA: 4.00* *Jan. 2021 – Present*
- **Visvesvaraya Technological University** Bangalore, India  
*Bachelor of Engineering in Computer Science and Engineering; GPA: 8.52 )* *Oct. 2015 – Sept. 2019*

## WORK EXPERIENCE

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- **University of South Dakota** Vermillion, SD  
*Data Initiative Student Assistant* *Aug 2022 - Present*
  - Gathering reports requirement; collaborating with the team lead using wireframe mockups
  - Utilized complex SQL join statements to represent relationship between facts and dimensions
  - Organized dashboards in Tableau to analyze the child abuse rate in different states of the United States
  - Modeling all the dashboards with appropriate filters for comprehensive analysis by state, child's removal from home due to various reasons
- **Ensemble Matrix** Kathmandu, Nepal  
*Machine Learning Engineer* *Nov 2020 - Dec 2021*
  - Led a small team for data collection and labeling process to make data ready for handwritten text recognition
  - Used convolutional LSTM network to extract handwritten text from images
  - Reproduced research papers and applied research methodology into new use cases
  - Helped financial institutions automate transaction process by using computer vision techniques to verify signatures and reduced the workforce of the institution by 20%
  - Created backend APIs to make model ready for production environment
- **Bitpoint Pvt. Ltd.** Kathmandu, Nepal  
*Software Engineer* *Nov 2019 - Nov 2020*
  - Created a backend system for medical entrance preparation using Nodejs
  - Used Vuejs to create admin portal that manages all data and users of the application
  - Integrating front-end element with the back-end API requests
  - Integrated payment functionality with different subscription tiers to let users subscribe the application

## TEACHING EXPERIENCE

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- **Achiever's Group** Kathmandu, Nepal  
*Python Instructor* *Apr 2021 - Dec 2021*
  - Delivered and facilitated course content
  - Led in-class exercises, project time, and participating in lecture discussions
  - Delivered content related to Python, Web development (Django), and Data Analysis

## PROJECTS

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- **Videos Transcription using Whisper:** Transcribed Stanford NLP lecture videos using OpenAI's whisper and deployed it into AWS EC2 using Flask. [Link](#)
- **Backend system for food delivery services:** Build Django Rest APIs for food delivery application. Integrated payment related third party APIs for the application and used CI/CD approach for deployment in Amazon EC2.

## PROGRAMMING SKILLS

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- **Languages:** Python, Javascript
- **Databases:** MySQL, PostgreSQL, MongoDB
- **Libraries:** Pytorch, Keras, Tensorflow, Huggingface Transformers
- **MLOps:** AWS, Docker, DVC, Prefect, Hydra, Github Actions, Model Packaging (ONNX)
- **Web Technologies:** Django, FastAPI, Nodejs, Vuejs