

# Sourav Mahato

☎ +91-9933575048 | ✉ souravmahato601@gmail.com | 🌐 sourav-mahato121 | 📄 souravmahato2004

## EDUCATION

<b>National Institute of Technology Sikkim</b> B.Tech - Computer Science and Engineering - <b>CGPA- 7.33</b>	Aug 2023 - Present Ravangla, Sikkim
<b>Asansol North Point School</b> Senior Secondary - <b>Percentage- 77.2%</b>	May 2022 Asansol, West Bengal
<b>Asansol North Point School</b> Secondary - <b>Percentage- 83.0%</b>	May 2020 Asansol, West Bengal

## EXPERIENCE

<b>Rojgaar</b> Full Stack Developer <ul style="list-style-type: none"><li>Developed an internship application platform using <b>React</b>, <b>Flask</b>, and <b>PostgreSQL</b>.</li><li>Implemented real-time chat functionality between users using <b>WebSockets</b> for active communication.</li></ul>	Dec 2025 – Present <i>Remote</i>
<b>YantraPragya Developers Pvt Ltd</b> AI Engineer <ul style="list-style-type: none"><li>Engineered a <b>U-Net architecture</b> from scratch with <b>skip connections</b> for high-precision segmentation.</li><li>Developed 512x512 RGB pipelines with bottleneck optimization and inference visualization for validation.</li></ul>	Dec 2025 – Jan 2026 <i>Remote</i>

## SKILLS

**AI & ML :** TensorFlow, OpenCV, Scikit-learn, CNNs, U-Net, Image Segmentation  
**Data Engineering :** NumPy, Pandas, Matplotlib, SQL, Data Preprocessing, ETL  
**Programming :** Python, C++, C, Java, JavaScript  
**Web & Backend :** Node.js, Express.js, React.js, FastAPI, Tailwind CSS, PHP  
**Tools :** Git/GitHub, Linux, VS Code, Figma

## PROJECTS

<b>Medical Image Segmentation</b>   📄   Python, PyTorch, OpenCV, Matplotlib, CNNs <ul style="list-style-type: none"><li>Engineered a U-Net model from scratch for high-precision semantic segmentation on 512x512 RGB dental imagery, extracting anatomical details of teeth and gums.</li><li>Optimized a symmetric encoder-decoder pipeline with skip connections to retain fine-grained spatial features, enabling accurate pixel-wise masking for diagnostic support.</li></ul>
<b>Predictive Diagnostic Analysis</b>   📄   Python, Scikit-learn, Pandas, NumPy, Matplotlib <ul style="list-style-type: none"><li>Developed classification models using Scikit-learn to predict diagnostic outcomes across medical datasets (Breast Cancer, Iris) with optimized accuracy.</li><li>Conducted extensive EDA and hyperparameter tuning across Decision Trees, KNN, and Naive Bayes to improve model robustness and feature scaling efficiency.</li></ul>
<b>Personal Portfolio Website</b> 📄   📄   HTML, CSS, Tailwind CSS, JavaScript, Vercel, Formspree <ul style="list-style-type: none"><li>Built and deployed a fully responsive personal portfolio from scratch using HTML, Tailwind CSS, and JavaScript, featuring a serverless contact form via Formspree.</li></ul>

## POSITIONS OF RESPONSIBILITY

<b>Member (Technical Team)</b> - Web Development Cell, NIT Sikkim	<b>Dec 2024 - Present</b>
<b>Member</b> - DEVCANS (Coding Club), NIT Sikkim	<b>Dec 2024 - Present</b>
<b>Volunteer</b> - Training and Placement Cell, NIT Sikkim	<b>May 2025 - Jan 2026</b>

## ACHIEVEMENTS

<b>LeetCode</b> 📄 <ul style="list-style-type: none"><li>Solved 80+ LeetCode problems focusing on Data Structures and Algorithms.</li></ul>
--