Satwik Shreshth

Software Developer | Machine Learning Enthusiast

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linkedin.com/in/satwik-shreshth | github.com/satwik-shreshth | Portfolio Website

Professional Summary

Motivated and detail-oriented MCA final-year student from Sikkim University with a strong foundation in software development, machine learning, deep learning, IoT, and remote sensing applications. Seeking an entry-level opportunity to apply computational and programming skills in data processing, system simulation, and real-world problem solving, while gaining hands-on experience in applied computer science and emerging technologies.

Education

Master of Computer Applications (MCA) – Pursuing   *Sept 2024 – Present*
Sikkim University, Sikkim   CGPA: 8.25 (1st Year)

Bachelor of Computer Applications (BCA)   *July 2019 – Apr 2022*
Magadh University, Bodhgaya, Bihar   70.06%

Intermediate of Science (BSEB)   *2017 – 2019*
A.M. College, Gaya   66%

Matriculation (JAC)   *2016 – 2017*
S.S.H.S. Pandeypura   81%

Technical Skills

Programming Languages: Python, C, C++, Java, JavaScript, HTML, CSS

Machine Learning & Deep Learning: CNN, U-Net, Random Forest, Image Processing, Model Training & Deployment

Data & GIS Tools: Google Earth Engine (GEE), QGIS, Satellite Image Analysis

Databases: Oracle 11g

Developer Tools: Git, GitHub, Jupyter Notebook, Google Colab, VS Code, Streamlit

Core Competencies: Software Development, Data Analysis, Image Classification, ML/DL, GIS Modeling, IoT Systems

Work Experience

Technical Representative   *Feb 2024 – Aug 2024*
Bytes Softech Pvt. Ltd. (C-DAC ATC Delhi)   Delhi, India
– Supported technical operations for national-level examinations including AFCAT, Agniveer Vayu, and ICG

– Handled system setup, software configuration, database management, and real-time troubleshooting

– Coordinated with technical teams to ensure smooth and secure examination execution

Internship Experience

Remote Sensing and GIS Intern   *Remote*
India Space Academy
– Conducted satellite image analysis for land cover classification and water body detection projects

– Applied GIS-based preprocessing, data visualization, and classification algorithms

– Developed expertise in satellite data interpretation and remote sensing workflows

Projects

Image-to-Sketch Generation using U-Net CNN
– Developed a deep learning pipeline to convert RGB photographs into pencil-style sketches using U-Net architecture

– Implemented MAE-SSIM loss function and deployed the model via Streamlit for real-time inference

Satellite-Based Land Use and Land Cover Classification
– Built a Random Forest classifier for multi-class land use pattern classification from satellite imagery

– Applied remote sensing techniques and feature engineering to improve classification accuracy

NDWI-Based Water Body Mapping
– Applied Normalized Difference Water Index (NDWI) algorithm to detect and map water bodies from satellite data
– Utilized Google Earth Engine (GEE) and QGIS for data processing and geospatial analysis

Personal Portfolio Website
– Designed and developed a fully responsive portfolio website using HTML, CSS, and JavaScript

CERTIFICATIONS

- **Computer Aided Decision Systems using Big Data Analytics** – NPTEL
- **Ethical Hacking** – NPTEL
- **Internet of Things** – NPTEL

LEADERSHIP EXPERIENCE

- **Team Representative, Bihar Contingent (NSS):** Represented Bihar at the 23rd National Youth Festival (Lucknow, 2020) and National Integration Camp (VBU, Hazaribagh), engaging in cultural exchange and promoting national unity.
- **Cultural Committee Member, SUSA:** Organized and coordinated multiple cultural events at Sikkim University.
- **NSS Volunteer:** Actively served in social service initiatives and community development programs under NSS.