SASWATA KUMAR DASH

✉ saswatdash577@gmail.com 📞 8056198316 in linkedin.com/in/saswatakumardash

github.com/saswatakumardash 🔗 portfolio </> leetcode.com/saswatakumardash

EDUCATION

Vellore Institute of Technology, Chennai 2021-2025
Bachelor of Technology in Computer Science and Engineering (Cyber-Physical System) *CGPA: 8.49*

ODM Public School, Bhubaneswar 2021
12th Std CBSE *Percentage: 82.83*

EXPERIENCE

Tomas Bata University in Zlín May 2024 – July 2024
Artificial Intelligence Research Intern *Zlín, Czech Republic, Europe*
- Engaged in a prestigious international internship under the mentorship of Prof. Roman Senkerik, Head of A.I. Lab.
- Developed a fine-tuned Llama 2 Model for enhancing the performance of Ai algorithms like the meta-heuristics algorithms, evolutionary algorithms, etc, and also curated dataset for fine-tuning from scratch.
- Explored advanced hyperparameter tuning frameworks and benchmarking randomized optimization algorithms.
- Gained hands-on experience working with the OpenAI API.
- Explored advanced hyperparameter tuning frameworks and benchmarking randomized optimization algorithms.

Teralumen Solutions Pvt Ltd August 2023 – December 2023
Artificial Intelligence in Biotech Intern *Chennai, Tamil Nadu, India*
- Developed AI algorithms for cancer margin detection using Terahertz measurements.
- Enhanced algorithms with OpenCV and other tools.
- Implemented CNN model with 92% , Random Forest Model with 88%, and SVM Model with 87% accuracy.
- Curated datasets from scratch for robust model training.
- Gained AI field experience through collaboration and knowledge-sharing.

PROJECTS

Bigram GPT | *Python, PyTorch, Neural Network, Kaggle, LLM, Jupyter Notebook* | *Explanation Video Link*
- Incorporating an external bigram language model by 25% Enhancements.
- Designed an enhanced version of Bigram Language Model, showcasing the power of AI and neural networks with a 20% improvement from the previous model.

Bilingual Text OCR to Audio Speech | *Python, FastAPI, CRNN, gTTS, HTML, CSS, JavaScript* | *Website Link*
- Developed a full-stack application to convert handwritten Tamil and English text into speech using a CRNN model with 92% and 95% accuracy.
- Featuring trackpad input, camera capture, and image upload for OCR, utilizing gTTS for audio speech.

Voice Cloning AI Model | *Python, PyTorch, Deep Learning, Kaggle, Tacotron2, Jupyter Notebook* | *Explanation Video Link*
- Developed a cutting edge solution for voice synthesis based on the Tacotron2 repository by Ryan Rudes, with significant enhancements and customizations.
- Utilized TensorFlow and a pre-trained model for natural-sounding audio synthesis, with a custom pickle model for efficient saving and loading.

TECHNICAL SKILLS AND INTERESTS

Languages: Python, SQL, C, Html, Css, Javascript
Technologies: scikit-learn, Tacotron2, Jupyter Notebook, OpenCV, Fine-tuning LLM, Terahertz Measurements, TensorFlow, PyTorch, Large Language Models, Command Line Interface, Neural Networks, Data Prepocessing
Areas Of Interest: Generative Artificial Intelligence, Deep Learning, Machine Learning, Artificial Intelligence, NLP
Soft Skills: Communication, Collaboration, Teamwork, Problem Solving

ACHIEVEMENTS AND CERTIFICATIONS

- Received **Professional Training certification in Python and Machine Learning** from IIT Kharagpur : **Certificate**
- Received Certification of completion for successfully completing **6 weeks internship using IBM** SkillsBuild in **Artificial Intelligence (AI)** from All India Council for Technical Education (AICTE) and Edunet Foundation : **Certificate**
- Access to Other Certifications : **drive.google.com/drive/Certificates**