Arunabh Gupta

Email: kumararunabhbsc@gmail.com
Github: https://github.com/KumarArunabh
Mobile: +91-790-3946-036
Linkedin: linkedin.com/in/arunabh-gupta-11b7b4202

Education

- **College Of Engineering Bhubaneswar** — Bhubaneswar, India
  Bachelor of Technology - Computer Science Engineering; GPA: 8.24 — *August 2019 - June 2023*
  Courses: *Python Programming, Data Structures, Analysis Of Algorithms, Artificial Intelligence, Machine Learning, Networking*

Skills Summary

- **Languages**: Python, JavaScript, HTML, CSS, DSA
- **Frameworks**: Django, ReactJS, Pandas, TensorFlow, Flask, NodeJS,
- **Tools**: Visual Studio Code, Burp Suite, GIT, Adobe Dreamweaver, MongoDB
- **Platforms**: Linux, Web, Windows, Microsoft Excel, AWS, Github, Gitlab, IBM Cloud
- **Soft Skills**: Exhibited leadership, event management, technical writing, public speaking, time management, team collaboration, problem solving, critical thinking, adaptability, and interpersonal communication.

Experience

- **IBM Skills Build, Edunet Foundation Internship Program** — Internship
  Internship: AI and Machine Learning Innovation — *Jan 2023 - Feb 2023*
  - **Machine Learning Model Development and Optimization**: Designed and fine-tuned machine learning models using Python, TensorFlow, and PyTorch, achieving a 15% improvement in accuracy.
  - **Sentiment Analysis Algorithm Implementation:**: Constructed and deployed machine learning algorithms, including decision trees and neural networks, to perform sentiment analysis effectively.
  - **Comprehensive Documentation and Knowledge Management**: Authored and maintained detailed documentation of AI model development processes for future reference and knowledge sharing.

Projects

- **Heart Disease Prediction - predicting potential heart disease (Numpy, pandas, matplotlib, warnings, standardscalar)**: Heart Disease Prediction Project Objective: Developed a machine learning model to predict the likelihood of heart disease in patients. Tools Used: Python, NumPy, pandas, Matplotlib, StandardScaler Data Preprocessing: Handled missing values and encoded categorical variables. Scaled features using StandardScaler. Exploratory Data Analysis: Visualized data distributions and correlations. Model Building: Split data into training and testing sets. Trained Logistic Regression model. Evaluated performance with accuracy, confusion matrix, and classification report. Model Tuning: Optimized hyperparameters using GridSearchCV. Applied cross-validation to ensure model robustness.(October '22)
- **Productivity-Boosting Task Scheduler**: Implemented an Automated Task Scheduler using Python, Flask for the backend, and React.js for the frontend, streamlining task management for users. (August '22)
- **Jarvis AI**: Engineered a cutting-edge virtual assistant named Jarvis using Python. Implemented advanced functionalities including voice recognition, natural language processing (NLP), and task automation. Utilized libraries such as SpeechRecognition and pyttsx3 for efficient voice input and output management. Integrated multiple APIs to enable comprehensive features such as real-time web scraping, automated email dispatch, and effective schedule management. Conducted rigorous testing and optimization to ensure high performance, reliability, and user satisfaction. (March '23)
- **Drag-n-drop machine learning environment**: Created an intuitive, Scratch-like tool for building machine learning pipelines with integrated tutorials for each concept. Leveraged Python and JavaScript to develop a user-friendly interface, enhancing accessibility and understanding of machine learning principles. (September '22)
- **Intelligent Auto-Reply AI Chatbot**: Developed and deployed an AI-powered chatbot capable of generating accurate and real-time responses to user queries. Utilized advanced machine learning algorithms and natural language processing (NLP) techniques to enhance the chatbot's understanding and interaction. Implemented the system using Python and JavaScript, ensuring seamless integration and efficient performance. Leveraged libraries and frameworks such as TensorFlow, PyTorch, and NLTK to build, train, and optimize the chatbot's capabilities. Conducted extensive testing and optimization to ensure high reliability and user satisfaction. (May '21)

Relevant Coursework

- **Python Programming & Data Structures and Algorithms (DSA) Proficiency**: Developed and deployed robust Python solutions utilizing comprehensive knowledge of data types, control structures, functions, and object-oriented programming. Engineered efficient data structures including arrays, linked lists, stacks, queues, trees, and graphs. Formulated and executed advanced algorithmic strategies for sorting, searching, and problem optimization, with a strong focus on computational efficiency and performance.

Courses and Certifications

- Tata Consultancy Services - Cybersecurity Analyst Job Simulation - Completed a job simulation involving identity and access management (IAM) for Tata Consultancy Services. 29 Jan 2024
- Oracle Certified - Oracle Cloud Data Management 2023 Certified Foundations Associate September 2023
- Tata - Data Visualisation: Empowering Business with Effective Insights Job Simulation January 2024

Leadership Experience

- **Engineering Expo Organizer, College of Engineering Bhubaneswar** — India
  Coordinated student projects and promoted STEM awareness, fostering engagement among participants. March 2023