




Rehan Khan

✉ dayel.rehan@gmail.com ☎ +919889995313  rehan-khan25  ryyhan  ORCID

Education

Oriental Institute of Science and Technology,
B.Tech - Computer Science and Engineering - (Data Science) GPA-8.76

2020 – 2024 | Bhopal

Professional Experience

Opsight.AI, AI/ML Intern Feb 2024 – present | New Delhi, India

- Applied machine learning and Natural Language Processing (NLP) techniques to develop a conversational AI chatbot for manufacturing operations.
- The chatbot, trained on manuals and specifications of manufacturing machines, indirectly contributed to an 89% increase in production efficiency through streamlined information retrieval and process optimization.
- Worked on a project centered around an EC series robot arm by Elite Robots, involving extensive data collection exceeding 30GB, identification and logging of over 50 requested data tags into InfluxDB, real-time monitoring and logging of robot controller data, and implementation of Python scripts to modify robot parameters.

National Institute of Technology Trichy (NIT Trichy), May 2023 – Jul 2023 | Remote
Summer Research Intern

- Researched Network Lateral Movement, emphasizing threat identification and mitigation within network infrastructures.
- Explored cyber security and machine learning concepts such as cyber deception and anomaly-based frameworks.
- Authored publication based on research findings, contributing valuable insights to the field of cyber security.

Projects

Algometrix [Available on PYPI, the official Python Package Index], Python, Scikit-Learn, PyPI 

- Developed and maintained Algometrix, a Python-based machine learning package for streamlined model selection and evaluation, resulting in a 25% reduction in model development time. Algometrix simplifies the comparison of machine learning algorithms, catering to classification (binary and multiclass) and regression tasks.
- Published Algometrix on the official Python Package Index (PyPI), enabling easy installation with pip, achieving over 1,000 downloads.


Machine Learning Streamlit App, Python, Streamlit, Scikit-Learn 

- Created a web app using Streamlit for data loading, exploration, visualization, and model selection.
- Implemented multiple classification algorithms like Logistic Regression, SVM, and Random Forest, increasing model accuracy by up to 18% across diverse datasets.

Publications

Conversational AI : Dialoguing Most Humanly With Non-Humans, Wiley Publications 

- Conducted an in-depth exploration of cutting-edge AI techniques like NLP, NLU, and NLG using GPT-3 for advanced conversational agents. Presented novel approaches and best practices for building intelligent conversational systems engaging in natural, human-like dialogues across various domains.
- Discussed applications in customer service, healthcare, and education.

IoT : Security Challenges & Concerns for Cyber Vulnerability, IGI Global 

- Analyzed security challenges and vulnerabilities in IoT systems.
- Discussed strategies to mitigate cyber vulnerabilities in IoT systems.








Skills

Languages — Python, Java, SQL

Technologies — Machine Learning, Data Analytics, Programming/Object-Oriented Programming, Spreadsheets, Research, Debugging, Prompt Engineering, Penetration Testing/Cyber Security, Ethical Hacking

Tools/Frameworks — Linux, Git/GitHub, Streamlit, Docker, SQLite, InfluxDB

Certificates

Harvard's CS50 Programming with Python  | Machine Learning Specialization by Andrew Ng  | Google Data Analytics Professional Certificate  | Google Cybersecurity Specialization  | AWS Machine Learning Foundations  | Write and Publish a Scientific Paper  | Philosophy of Science  | AI, Empathy & Ethics 