

NOAIMA BARI

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EDUCATION

- Georgia Institute of Technology** Atlanta, GA, USA
*Master of Science (MS), Electrical & Computer Engineering: **Signal Processing and ML Specialization*** Aug 21 - May 23
Coursework: Machine learning, Computer Vision, Mathematical Foundations of Machine learning, Database Systems, Advanced Programming Techniques, Medical Image Processing, Natural Language Processing, Tech Entrepreneurship
- Jamia Millia Islamia University** Delhi, India
*Bachelor of Technology, Electrical Engineering: **GPA: 9.91/10 (Rank 1)*** Aug 17 - May 21

SKILLS

Languages: C++, Python, Go, SQL, JavaScript, HTML, CSS

Technologies/Frameworks: PyTorch, Flask, NumPy, AWS Lambda, Latex, Git, PostgreSQL, Agile Methodologies, JIRA

Certifications: Data Structures and Algorithms in C++ (Coding Blocks), Deep Learning Specialization (deeplearning.io)

EXPERIENCE

ALTAIR ENGINEERING Inc.

Software Engineer Intern

Troy, MI

Aug 22 – Dec 22

- Working with the HyperWorks core development team to develop a user assisting tool
- Performing data analysis and utilizing language modelling concepts for providing recommendations
- Tech Stack:** Python, Pandas, TensorFlow, GUI

REVEL SYSTEMS

Software Engineer Intern

Atlanta, GA

May 22 – Jul 22

- Worked in an Agile Environment to build a menu engineering dashboard for QSRs to optimize their menu
- Utilized AWS Lambda as the backend engine and AWS AppSync for a GraphQL API to serve requests
- Performed statistical analysis on sales data and utilized PostgreSQL to query complex results
- Contributed towards architecture and database designs for the project
- Tech Stack:** Backend: Go, GraphQL, AWS Lambda, AppSync, RDS, Frontend: React, Chart.js, JavaScript,

CODING NINJAS

Teaching Assistant Intern, Data Science & Machine Learning

Delhi, India

Nov 20 - Mar 21

- Conducted daily doubt sessions for undergraduate students in areas of machine learning, neural networks & data science
- Graded assignments, evaluated projects and debugged python codes for **over 200 students**

LASER SCIENCE AND TECHNOLOGY CENTER (DRDO)

Control Systems Intern

Delhi, India

Jan 20 – Feb 20

- Worked on Control System Design for Dual Axis Gimbal Assembly using concepts of conventional control theory
- Designed a feedback control system for velocity and position control of DC motors using MATLAB Simulink

RELEVANT PROJECTS

- [Image Processing & Computer Vision] Automatic Detection and Grading of Diabetic Retinopathy** Feb 22 – May 22
 - Created a decision-making pipeline involving data augmentation, image processing, feature engineering & classification
 - Developed an ensemble model using CNN algorithms with an average **MCC of 74%**
 - Developed an explainable AI methodology using Grad-CAM for better interpretability of results
- [Natural Language Processing] Idiomatcity Detection using Zero-Shot and One-Shot Learning** Feb 22 – May 22
 - Performed cleaning, pre-processing, EDA and feature engineering on idioms dataset from SemEval22 task
 - Fined tuned pretrained supervised deep learning models and tested their performance
 - Achieved an accuracy of 78% and F1-score of 73% with XLNet in zero-shot settings
- [Database Systems] Airline Booking Management System** Aug 21 – Dec 21
 - Created an app using Flask and MySQL database for booking flight tickets and performing search operations
 - Performed conceptual modelling using EER Diagram and logical mapping to a relational data model
 - Implemented queries for searching, booking, retrieving, cancelling flights and generating reports

PUBLICATIONS

- Interpretable Evaluation of Diabetic Retinopathy Grade Regarding Eye Color Fundus Images** Sept 22
 - Accepted at IEEE International Conference on Bioinformatics and Bioengineering (BIBE 2022)
- Language Lexicons for Hindi-English Multilingual Text-Processing** Dec 21
 - IAES International Journal of Artificial Intelligence (IJ-AI) Vol. 8 pp. 31-38
- Priority Based Power Delivery System for Electric Vehicle Charging** Dec 20
 - Artificial Intelligence Systems and the Internet of Things in the Digital Era proceedings by Springer Verlag

ACHIEVEMENTS

- Gold Medal – B. Tech Electrical Engineering, JMI (Batch of 2021) Sept 21
- Outstanding Women in Engineering Award, IEEE Delhi Section Nov 20
- National Finalist - Smart India Hackathon (2020) (Software Edition) Aug 20