Soumik Paul

Charlotte,NC,28262 | soumikpaul02@gmail.com | (980)-920-9675 | linkedIn//soumikpaul9/ | github//SoumikPaul108 | website.com

EDUCATION

University of North Carolina at Charlotte   GPA: 3.83/4.0 | Dec 2023
Master in Computer Science
Institute of Engineering and Management   GPA: 8.50/10 | July 2021
Bachelor of Technology in Computer Science and Engineering

SKILLS

Languages: Java, Python, JavaScript, C/C++   **Version Control:** Git, GitHub
Frontend: HTML, CSS, ReactJS, Bootstrap   **Databases:** MySQL, MongoDB
Backend: Spring Boot, Spring MVC, Hibernate, JSP, NodeJS, ExpressJS, Django   **Data Visualization:** Tableau, AWS Quick Sight
Other: AWS, Docker, Linux, Object Oriented Programming, Jenkins

WORK EXPERIENCE

UNIVERSITY OF NORTH CAROLINA AT CHARLOTTE | Research Assistant   Charlotte, NC | Feb 2023 – May 2023

- Utilized newspaper3k Python library to transform HTML links into text format and applied the **Bert Language model** to generate **embeddings**. Optimized and **debugged** the script, achieving a significant **45% reduction in time complexity**. (Link)

UNIVERSITY OF NORTH CAROLINA AT CHARLOTTE | Instructional Assistant   Charlotte, NC | Dec 2022 - May 2023

- Assisted lead instructor Gabriel Terejanu, Phd in delivering and designing course material, grading assignments, and providing academic support to 75 students.

COGNIZANT | Programmer Analyst Trainee   Bangalore,India | April 2021 – July 2022

- Contributed and maintained a schedule reminder **microservice** in **NodeJS**, resulting in 14% increase in user consumption.
- Integrated **MongoDB** for efficient data storage and retrieval, optimizing application performance.
- Created **RESTful APIs** on the backend to fetch consumer details regarding the order using **ExpressJS**, facilitating seamless communication between the front end and back end.
- Implemented a user-friendly UI using **ReactJS**, enhancing user experience and engagement.
- Implemented user authentication and authorization using **JWT** to ensure secure access to application features.
- Developed a **Python-based microservice** responsible for transmitting metrics to Prometheus, effectively triggering alerts for service engineers whenever metric consumption surpasses predefined threshold values.
- Leveraged **Git** as a version control system, actively engaging in collaborative workflows through constructive code reviews.
- Participated in Scrum processes, contributing to sprint planning, stand-ups, and retrospectives.

PROJECTS

LOAN REPAYMENT PREDICTION ⬈   Dec 2022
Designed and deployed a loan repayment prediction system on **AWS**, leveraging S3, Glue, Athena, QuickSight, Tableau, and SageMaker. Employed **Random Forest and XGBoost** algorithms, achieving an impressive **95% accuracy** in loan repayment rate predictions. Automated data processing tasks with **AWS Glue ETL** jobs

YELP REVIEW ANALYSIS ⬈   Dec 2022
Developed a Yelp review classification model with **Naive Bayes**, achieving an **85% accuracy rate**. Conducted sentiment analysis and employed Word Cloud visualization for data insights. Made use of **Django for back-end development and ReactJS for the front-end**, resulting in a responsive and user-friendly application.

JOB PORTAL ⬈   May 2021
Formulated a job search platform with a team of two, utilizing **PHP, HTML, CSS, Bootstrap, MySQL and JavaScript** to create a user-friendly interface and incorporate essential features such as data editing, updating, deletion, and addition.

CAR PURCHASING AMOUNT PREDICTOR ⬈   Sept 2020
Constructed a car expenditure prediction model using **Artificial Neural Network**. Made use of Python libraries and frameworks like **NumPy, Pandas, Matplotlib, Seaborn and TensorFlow**, resulting in a **75% high accuracy rate**.

ACHIEVEMENT AND CERTIFICATION

- Awarded **2nd prize in Hackathon** for developing a real-time hospital bed availability and blood reserves tracking system.
- Achieved a top **1% ranking** in TCS Digital coding context, solving complex algorithmic challenges efficiently.
- Certified Amazon Web Service: AWS Academy Graduate -AWS Academy Data Analytics **(Link)**