# **Shyamal Mishra**

Philadelphia, PA | sm4825@drexel.edu | +1 (267)-6658602 | LinkedIn | github | portfolio

#### SKILLS

Languages: Java, Python, C++, SQL, JavaScript, HTML5, CSS

**Databases & Frameworks:** NoSQL, MySQL, PostgreSQL, MongoDB, React, Node.js, Flask, TensorFlow **Libraries & Tools:** Kafka, Git, Docker, Pandas, NLTK, OpenCV, scikit-learn, Pandas, NumPy, selenium, SciPy **Others:** Linux, git, GCP, REST API, Jenkins, Postman, PyTorch, Kubernetes, JIRA, AWS, PySpark, SOAP, Gen AI

#### **EDUCATION**

Master of Science - Computer Science | Drexel University | GPA: 3.7/4.0

Aug 2022 - Jun 2024

Relevant coursework: Artificial Intelligence, Machine Learning, Data Structures and Algorithms, Software Architecture, Cloud Computing, Computer Vision, Agile Software Development

Bachelor of Technology - Information Technology | KIIT, Bhubaneswar

Jul 2015 - Mar 2019

#### EXPERIENCE

#### NLP Research Assistant | SOAR Lab, Drexel University, PA, USA

Jun 2023 - Dec 2023

- Designed a Natural Language Processing (NLP) bot distinguishing toxic interactions, leading to an 89% accuracy rate.
- Improved model accuracy on classification tasks by fine-tuning LLMs with transfer learning techniques.
- Accepted Paper: "Exploring ChatGPT for Toxicity Detection in GitHub", at the 46th International Conference on Software Engineering (ICSE, Apr 2024) (Acceptance rate: 22%)

## Software Developer | Deloitte, Hyderabad

Apr 2019 – Aug 2022

- Led the development of a robust data synchronization framework, leveraging real-time update mechanisms and advanced algorithms to ensure seamless integration across 7 platforms.
- Implemented indexing and caching strategies for search functionality, cutting average search latency by 600 ms.
- Developed a custom chunked data transfer system with parallel processing reducing large file transfer timeouts by 13%.
- Introduced Spark for efficient data ingestion within a UHIP Project, benefiting thousands of Rhode Island users.

#### Web Developer Intern | Tata Technologies, Jamshedpur

May 2017 - Aug 2017

- Contributed to creating a cafeteria ordering app, leading to an average decrease of 4 minutes in food delivery time.
- · Revamped the menu navigation structure to categorize items more effectively and improve discoverability.

#### **ACADEMIC PROJECTS**

#### **BrainTeaser AI Puzzle Solver**

Jan 2024

- Crafted an agent that utilized BFS, DFS, and A\* search algorithms, successfully achieving a solve rate of 95%.
- · Utilized Q-learning in maze-solving, resulting in a 90% completion rate with an average path length of 25 steps.

### Wildlife conservation using Image Identification System

Nov 2023

- Developed animal species detection and classification models utilizing TensorFlow and transfer learning techniques.
- Faster R-CNN outperformed SSD with an overall accuracy of 91% and higher mean average precision scores.

## **Full Stack Mental Health Support Platform**

Jun 2023

- · Created a well-being platform for emotion analysis, Mood Tracking, and online community support.
- Incorporated an interactive chatbot for conducting assessments providing users with personalized insights.

#### **ACHIEVEMENTS & CERTIFICATION**

• Teaching Assistant for Programming languages & DBMS | Drexel University

Sep 2023 - Mar 2024

Secured second place among 12 groups in developing user interface. | Drexel University

Mar 2024

- Community Outreach Coordinator at Sashakti Foundation | Public Relations and Community Engagement
- Earned Certification in Pytorch for Deep learning | LinkedIn (Credential: ATbW2062 UArLgVzT2yNyXxr92Tn)