# Shivam Mishra

+18123610960 | shimish@iu.edu | shivam-mishra.com | github | linkedin.com/shivam-mishra0296

#### **EDUCATION**

### **Indiana University, Bloomington, United States**

Aug 2022 - May 2024

Master of Science in In Data Science

Courses (Fall 2022): Applied Algorithms, Advance Database Concepts, Introduction to Statistics

#### Vellore Institute of Technology, Chennai, India

May 2015 - Apr 2019

B.Tech Electronics and Communication | GPA: 3.93 / 4

Courses: Data Structures and Algorithms, Operating Systems, Object Oriented Programming, Neural Networks

#### **TECHNICAL SKILLS**

- Programming languages: C, C++, Python, Golang, Java, SQL, R
- Libraries/Frameworks: Pandas, Scikit-learn, Flask, React, NumPy, Spark, Hadoop
- Other Tools & Databases: Matlab, Tableau, Splunk, Git bash, Grafana, Kubernetes, MySQL, AWS

#### PROFESSIONAL EXPERIENCE

#### Indiana University, O'Neill School of Public & Environmental Affairs, United States

Aug 2022 - Present

Graduate Research Assistant (Part Time)

- Working As a Graduate Research Assistant under professor Kosali Simon and Analyzing transparency in coverage data for health insurers across United States.
- Writing efficient Python parsers to convert large JSON files into readable CSV files and make it easier to comprehend for research purposes.
- Designing the schema for storing the transparency in coverage data from various insurers and writing efficient Python code to store the same in SQL database and make it available for research.

Ericsson, Bangalore, India Jun 2021 – Aug 2022

Software Developer – Cloud Container Distribution - Software Defined Networks

- Managed all the containerized applications deployed in Ericsson products using Kubernetes and open stack heat deployments.
- Handled Splunk Data for a platform for analyzing and managing data related to a project using open-source tools such as Kube state metrics and Node Exporter and adding efficient Python code for various analytics.
- Developed projects to automate version update process on large set of yaml and json files using efficient algorithms in Python/Golang programming languages and improve the process efficiency by 50%.

Blackrock, Mumbai, India Jul 2019 – Jun 2021

Analyst – Data and AI - Production monitoring

- Built data monitoring tools to analyze and read the data coming from the files of various Aladdin clients by using Python and React for Blackrock's Green package teams for Analytics and tracking the service level agreements efficiently.
- Created a file monitoring tool to manage the data coming from the large set of json files of various Index vendors to perform benchmark analytics by designing efficient algorithm, coding the same in Python and improved the data management.

Technology Intern – Data and AI

Jan 2019 - Jul 2019

- Converted old code bases in Perl language to more efficient Python language to improve productions efficiency.
- Explored various tools and languages such as Python, React, Git, Tableau to implement on financial data.

## **ACADEMIC PROJECTS AND PAPERS**

#### **IoT Enabled Farming Assist and Security Using Machine Learning**

- Proposed a system that guides farmers to obtain larger quantities of produce from their fields and ensure crop security by analyzing various factors such as temperature, moisture content using Machine learning and IoT.
- Co-Authored and published a paper on the same in ARPN Journal, Volume 14, Issue 9, ISSN: 1819-6608.
- Won Best Project Based Learning Award at VIT Chennai in September 2017 for the same.

### Smart Production and Logistics System (Based on Machine Learning)

- Analyzed and surveyed machines in a production line of Nokia Chennai factory. Collected the values of Power, voltage, and temperatures on a normal working condition. Trained the model (K nearest neighbors) on the collected values.
- Recorded same values for a day and was given as input to determine if any machine is behaving abnormally and therefore replace faulty machines as a preemptive measure to ensure normal functioning of the production line.
- Won IoT Make-a-thon organized by Nokia and availed an internship opportunity at Nokia in year 2018.

## **Home Automation and Security System**

• Created a user specific smart lock and voice assisted system using Raspberry – pi and MATLAB for smart homes. Collected voice samples through raspberry – pi and converted it in data metrices in MATLAB to implement the same.