# Snehal Sudhir Bhole

# **Professional Summary**

Skilled Software Developer with over 3 years of experience in delivering customer-focused solutions through Software Development, Machine Learning and ETL tools. Proficient in programming with a strong grasp of OOP concepts. Adept at collaborating with cross-functional teams, demonstrating initiative and agility in meeting aggressive deadlines while staying committed to continuous learning.

### Education

## University of Ottawa

Sep 2022 - May 2024

Master of Computer Science – Concentration in Applied Artificial Intelligence (GPA: 3.72/4)

Ottawa, Canada

- Worked as a Teaching Assistant for Network Security and Software Architecture and Construction.
- Courses: ML, NLP, AI for Cyber Security, Virtual Assistants, Big Data Management.

#### University of Mumbai

Aug 2016 - Oct 2020

Bachelors in Engineering, Computer Engineering (GPA: 9.23/10)

Mumbai, India

- Paper published on "Estimating Food Nutrients Using Region-Based CNN" @ICCIDE 2020.
- Courses: Data Structures and Algorithms, System Design, Software Engineering, Cloud Computing.

### Skills

Languages: Python, C++, Java, C#, JavaScript, Unix, ReactJS, NodeJS, Django, Flask, TypeScript, RabbitMQ. Database Management: MySQL, PostgreSQL, MongoDB, Spark, Databricks, DB2, Oracle, Redis, Cassandra. ML and Data Science: Predictive modelling, Ensemble techniques, Neural Networks, IBM InfoSphere Suite, Airflow. Automation and DevOps: CI/CD, Jenkins, GitHub, Jira, Docker, TestRail, Confluence, IBM UCD.

Cloud: AWS (Lambda, EC2, S3, RDS, SageMaker).

Certificates: Software Architecture Foundation, Django, JAVA, Python, Data Visualisations.

### Experience

## Ford Motor Company

May 2023 - Dec 2023

Software Developer

Kanata, Ontario

- Developed a project management GUI tool using Django and MVC, resulting in a 40% faster delivery.
- Optimized code quality with SonarQube, reducing code complexity and improving code coverage by 20%.
- Crafted scripts for data processing and testing using Slash and APIs, reducing testing time by 30%.
- Automated tests implementing Test-Driven development principles for script engine, increasing reliability by 15%.

### **Tata Consultancy Services**

Aug 2020 - Aug 2022

Software Engineer

Mumbai, India

- Constructed interactive web modules using Django and PostgreSQL, delivering a robust system for over 500 users.
- Designed and optimized ETL pipelines with DataStage, Unix, and Python, reducing data processing time by 35%.
- Orchestrated CI/CD data-quality pipeline with Jenkins and UCD, reducing manual efforts by 25%.
- Reduced system vulnerability by 20% with software and security enhancements in UAT and Production environments.
- Enhanced team efficiency by participating in 200+ scrum meetings, facilitating swift issue resolution.

#### Eastwest Electrical and Electronics NDT Pvt. Ltd.

May 2018 - Oct 2018

 $Full ext{-}Stack\ Developer$ 

Mumbai, India

- Initiated Django-based microservices architecture transition, elevating Calibration Certificate System efficiency by 45%.
- Improved operational efficiency of SQL databases by 20% using 10+ triggers and procedures.
- Leveraged Tableau for data analysis to identify trends, resulting in a 25% increase in development productivity.

#### Projects

- Scene Parsing for Autonomous Vehicles | Image Processing, RestAPIs, Data Processing, Neural Networks Led a team of 5 to develop a working prototype of deep learning model APIs using image segmentation models like UNET and YOLO, achieving stable models and 82% model accuracy.
- Speech-based Virtual Assistant-Vision | Full-Stack, NLP, LLM, AWS, RestAPIs, Python Engineered a cloud-native chatbot with 78% accuracy in speech recognition using BERT, Spark, AWS Lambda, EC2, Sage Maker and Restful APIs.
- Malware Classification Using API Call Histogram | Machine Learning Trained XGBoost, SVM, Random Forest and MLP on API call histogram data extracted from Coocku sandbox, achieving 89% reliability score while leveraging PCA to reduce dimensionality and tuning hyper-parameters.

#### Achievements

- Solved 150+ problems on Leetcode, 5-star badge on Hackerrank.
- Collaborated with stakeholders to launch 30+ RESTful APIs, optimizing data exchange and communication.
- Received "Star of the Quarter" award for exceptional performance, skills, innovation, and consistent contributions.