

# Harsimran Singh Dhillon

Binghamton, NY | (607)-296-8536 | [hdhillon@binghamton.edu](mailto:hdhillon@binghamton.edu) | [linkedin.com/in/harsimransinghdhillon](https://www.linkedin.com/in/harsimransinghdhillon) | [github.com/harsi15](https://github.com/harsi15)  
[harsi15.github.io/HarsimranSinghDhillon/](https://harsi15.github.io/HarsimranSinghDhillon/)

## EDUCATION

### Binghamton University, Watson College of Engineering

Binghamton, USA

Masters of Science, Computer Science | GPA : 3.67 / 4.00

August 2023 - May 2025

Relevant Coursework: Data Structures and Algorithms, Operating Systems, Programming Languages, Database Systems, Computer Security

### Pune University, K. K. Wagh Institute Of Engineering Education And Research

Nashik, India

Bachelor of Engineering, Computer Engineering | GPA : 3.64 / 4.00

August 2017 - June 2021

Relevant Coursework: Object Oriented Programming, Relational Database Management, System Programming, Cloud Computing

## SKILLS AND INTERESTS

**Programming & Web Development:** Java, Python, C, C++, React, Angular, JavaScript, HTML, CSS, TypeScript, Vue.js, Bootstrap

**Backend & Database:** Apache Camel, Spring Boot, Anaconda, Gradle, MySQL(SQL), MongoDB(NoSQL), Oracle

**Project Management:** Git, Github, Gitlab, Docker, Kubernetes, Jenkins, Jira, Bitbucket, Agile & Scrum

**Frameworks & Tools:** HTTP, XML, YAML, JSON, Amazon Web Services (AWS), Workflow & Architecture, MVC, Node, Figma, Postman, IntelliJ IDE, Visual Studio Code, Android Studio, Xcode(ios), Confluence(Documentation), LaTeX, Splunk

## WORK EXPERIENCE

### Analyst, Software Developer

Pune, India

TIAA GBS

July 2021 - July 2023

- Implemented agile methodology for continuous integration and support during critical 4-month API migration from Mule framework to Apache Camel
- Reduced response times during server outages by 40% by analyzing and resolving complex issues, and supporting the testing team to validate acceptance criteria while optimizing the CI/CD of a REST API
- Resolved an application server crash issue in the production environment by preserving 40% of the memory used; addressed production issues and enhancements; and offered DevOps support for 4 applications
- Automated a human task of closing thousands of requests using queries and a scheduler to minimize manual effort by 35%

### Machine Learning Intern

Nashik, India

Cognifront

June 2020 - July 2020

- Delivered Attendance Marking System to the client to reduce manual labor by 25% and paper waste by 40%
- Analyzed and implemented Decision Tree algorithm, KNN algorithm, and SVM algorithm
- Evaluated a project to study accuracy and error obtained for a particular data set using 4 different algorithms

## PROJECT

### Depression Detection System, Full Stack Developer | Group Project

April 2021

- Led a team of 3 to design a machine learning project based on 3 modules namely Facial features, Acoustic features, and PHQ-9 questionnaire to detect depression
- Created and built the website's UI/UX using Vue.js and JavaScript to integrate all the 3 components
- Implemented the backend module to extract the facial features with an accuracy of 86%

### Online Food Ordering Application, Frontend Developer | Group Project

March 2020

- Created an online meal ordering website using web technologies like Angular, JavaScript, HTML, CSS, and MySQL database
- Led the design and implementation of the website's frontend and the development of backend data mapping using Angular and JavaScript
- Revamped website performance and decreased latency by 20% through data caching and search engine optimization strategies

### Clinic Staff Attendance System, Full Stack Developer | Group Project

March 2019

- Revamped the accuracy of an existing machine learning model by feature selection to achieve an accuracy of 87%
- Led the design and implementation of the website's user interface (UI) and the development of back-end data mapping using Vue.js and JavaScript

## EXTRACURRICULAR ACTIVITIES

- Multicultural Event Planning Committee Member - Graduate Student Organization
- Played inter-collegiate football tournament for 3 consecutive years(2018-2020), 2 times runner-up in KSF football tournament(2019-2020), and represented the Nashik district in a football tournament

## PUBLICATION

- Research paper - **Machine Learning-Based Depression Classification Model** in the IJCRT journal (ISSN: 2320-2882 and Impact factor: 7.97)