Harsimran Singh Dhillon

Binghamton, NY | (607)-296-8536 | hdhillon@binghamton.edu | linkedin.com/in/harsimransinghdhillon | github.com/harsi15
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, 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, JSON, JQuery, Amazon Web Services (AWS), Workflow & Architecture, MVC, Node, Figma, Postman, IntelliJ IDE, Visual Studio Code, Android Studio, Xcode(ios), Confluence(Documentation), LaTeX

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 Angular 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)