kharwarparth@gmail.com | 614-680-1116 | LinkedIn | Website

Education

Master of Science – Computer Science | The Ohio State University

Relevant coursework: Algorithms, Machine Learning, Al for Autonomous Driving, Computer Vision

Bachelor of Engineering – Computer Engineering | University of Mumbai

Relevant coursework: Data Structures, Artificial Intelligence, Robotics, Natural Language Processing

Professional Experience

Freelance Software Development | MedForAll | Columbus, OH

Leading the integration of smart-home devices to provide accessibility for individuals with disabilities

- Studied and tested various smart devices to identify the most effective interaction, sensing, and feedback hardware
- Researched and built integrations for the individual approaches using Z-wave, ZigBee and Wi-Fi communication protocols
- Developed methodologies to incorporate devices depending on client disabilities and requirements ٠

Software Development Engineer | Parsimony.com | Mumbai, India

Developing ERP features on open-source framework ERPNext empowering companies using online marketplaces

- Built a cross-platform browser extension to access SOPs across websites unifying the workflow that is now a stand-alone product ٠
- Developed client-customizable analytic dashboards providing powerful insight into product performance and guide decisions
- Built a web scraper collecting data from the Amazon storefront to facilitate automated client notifications on product changes ٠

Mobile Application Developer | Cerebranium OU | Remote, Mumbai, India

Modernizing Doctor-Patient connections during the COVID pandemic via a mobile-first health platform built on Flutter

- Developed the base architecture, unifying theme, and analytic charts used across both Patient and Doctor applications •
- Enabled secure and seamless user signup and information transfer by integrating cloud functionality with Google Firebase
- Provided predicted diagnosis via machine learning on tracked symptoms and secure audio-video conferencing with doctors

Web Development | Freelance | Mumbai, India

Building user-friendly websites promoting businesses and individuals

- Business website for Priyaanka Shah, Clinical Psychologist •
- Educational website for Stroop Testing individuals
- Business website for Natech Solutions India Pvt. Ltd. ٠

Technical Skills

- Languages and libraries: Python, C, C++, Java, SQL, Dart, MATLAB ٠
- Frameworks: Ionic, VueJS, NestJS, Flutter ٠
- Web Development: HTML, CSS, JavaScript, TypeScript, JQuery, Tailwind and Bootstrap
- Databases technologies: MySQL, PostgreSQL, PHP, Firebase, MariaDB
- Software toolkit: Git and GitHub, Unix CLI tools, DevOps, Microsoft Office, Docker, Windows and Linux environments •

Projects

FlexSmart – Fitness Trainer | Ionic, TensorFlow JS

- Reduced the need for expensive personal trainers using a mobile application analyzing posture in real-time with correction alerts
- Used Pose Estimation in TensorFlow JS with Mobile Net on an Ionic framework application with a retrained model for exercise ٠

TourTime – Virtual Tour Guide | Ionic, TensorFlow JS, NestJS, PostgreSQL, VueJS

- Aimed to increase tourism by identifying landmarks via trained image recognition and provide an audio-visual tour
- Built an analytical dashboard to track tourist metrics, facilitate easy location management and predict visitation patterns •

RunTime – Tire Pressure Monitoring System for the Bridgestone Corporation | Python Kivy, HTML | Awarded first place at SIH 2019

- Aimed to reduce performance impacts of poor tire health using a Python Kivy mobile application monitoring tire pressures •
- Developed an analytics dashboard tracking vehicles in a fleet and predicting tire-failure based on a self-supervised learning model

Achievements

Published a research paper on Accessible and Ethical Data Annotation with the Application of Gamification (India 2019)

Sep 2018 – Jun 2020

Feb 2022 – April 2022

Apr 2020 – Jun 2020

Jun 2020 – Jul 2021

Aug 2021 – May 2023 Aug 2016 - May 2020

CGPA: 8.78 / 10