Parth Kharwar

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Education

Master of Science – Computer Science | The Ohio State University   Aug 2021 – May 2023
Relevant coursework: Machine Learning, Artificial Intelligence, Computer Vision

Bachelor of Engineering – Computer Engineering | University of Mumbai   Aug 2016 – May 2020
Relevant coursework: Analysis of Algorithms, Data Structures, Artificial Intelligence, Robotics, Natural Language   CGPA: 8.78 / 10

Professional Experience

Freelance Software Development | MedForAll | Columbus, OH   Feb 2022 – Present
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

Software Development Engineer | Parsimony.com | Mumbai, India   Jun 2020 – Jul 2021
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
- 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

Mobile Application Developer | Cerebranium OU | Remote, Mumbai, India   Apr 2020 – Jun 2020
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   Apr 2020 – Jun 2020
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.

Technical Skills

- Languages and libraries: Python, C, C++, Java, SQL, Dart, MATLAB
- Frameworks: Ionic, VueJS, NestJS, Flutter
- Web Development: HTML, CSS, JQuery, JavaScript, TypeScript, 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

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)