TOUHID IMAM

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Summary

I'm a Web Developer with over 5 years of experience building and optimizing websites using HTML5, CSS3, JavaScript, ReactJS, Python, Django, PHP, and WordPress. I specialize in creating responsive, user-friendly designs and custom solutions that align with client needs. Alongside my professional experience, as a graduate student pursuing a Master's in Computer Science at the University of South Dakota, I've gained research experience in machine learning and AI. My work includes building predictive models and applying advanced algorithms to solve real-world problems, showcasing my passion for innovation and technology-driven solutions. I am also open to relocation for the right opportunity.

Experience

- **Web Developer**
  Rock IT Fuel Design & Technology, Ontario, Canada
  April 2020 – August 2023
  - Managed and optimized multiple websites by troubleshooting and resolving bugs in Python and Django applications, ensuring smooth performance and reliability.
  - Developed PHP applications and built WordPress sites from the ground up, creating custom themes and features based on the unique needs of clients.
  - Collaborated with clients to develop tailored solutions, aligning web projects with business goals, which improved overall website functionality and user experience.
- **PHP and Frontend Developer**
  Magic Web Studios Moreno Valley, California
  January 2018 – March 2020
  - Built and maintained PHP and WordPress websites, focusing on customizations and enhancing site features.
  - Developed frontend components with HTML, CSS, JavaScript, ReactJS and PHP ensuring responsive and visually appealing user interfaces.
  - Partnered with the design team to implement cohesive, user-friendly interfaces that met client needs and business objectives.

Skills

- **Languages:** JavaScript (ES6+), TypeScript, PHP, Python
- **Web Design:** HTML, CSS, SCSS, Bootstrap, Tailwind CSS
- **Frameworks & Libraries:** ReactJS, Django, Pandas, Matplotlib, Scikit-Learn
- **Machine Learning:** Model Training and Evaluation, Data Preprocessing, Feature Engineering
- **CMS:** WordPress, Shopify

- **Database:** MySQL
- **Development Tools:** Git, Docker, Visual Studio
- **Design Tools:** Photoshop, Figma

Projects

- **PlayScout React App**
  Technologies: ReactJS, TailwindCSS, Zustand, HTML
  - Developed a single-page application (SPA) for video game enthusiasts, enabling users to explore a wide selection of games with filters for genres and platforms, and sorting options by relevance, release date, popularity, and average rating.
  - Utilized Zustand for efficient state management, ensuring smooth user interactions and enhancing performance across various filtering and sorting functionalities.
  - Built a responsive and visually cohesive UI using TailwindCSS, providing an engaging and consistent user experience across devices.
  - Focused on performance optimization, minimizing load times and increasing user session duration by 25%.
- **Custom WordPress Site for Local Business**
  Technologies: PHP, WordPress, HTML, CSS, JS
  - Built a custom WordPress site from scratch, including theme development and custom plugins to meet client-specific requirements.
  - Improved client's site functionality and aesthetics, leading to a 30% boost in traffic and user retention.

Certifications

- **Ultimate Django Series** *Code with Mosh, 2024*
  - Acquired in-depth knowledge of Django, including database management, ORM, and MySQL integration.
  - Built RESTful APIs, implemented authentication with JSON Web Tokens, and optimized performance with caching and Celery.
  - Learned troubleshooting techniques, automated testing with pytest, and applied industry best practices for scalable development.
- **ReactJS with TypeScript** *Code with Mosh, 2024*
  - Gained expertise in building front-end applications with React and TypeScript, using React Query for data fetching and caching.
  - Implemented state management using Zustand, used React Router for navigation, and optimized applications with reducers and context.
  - Employed modern development techniques and best practices to write clean, maintainable code.
- **Python Projects** *Code with Mosh, 2024*
  - Developed problem-solving skills by creating practical Python projects, focusing on clean, maintainable code.

- Enhanced programming skills through project-based learning, code refactoring, and incremental project complexity.
- Strengthened proficiency in professional coding practices and logical code structuring.

- **Supervised Machine Learning: Regression and Classification** *Coursera, 2024*
  - Gained foundational knowledge in supervised learning techniques, including linear and logistic regression, and classification models.
  - Learned to apply Python and Scikit-Learn for model training, evaluation, and deployment in real-world scenarios.
  - Developed skills in data preprocessing, feature selection, and cross-validation to improve model performance.

- **PHP App Development** *BASIS Institute of Technology & Management (BITM), 2016*
  - Learned core PHP concepts and frameworks, including Laravel, for building dynamic web applications.
  - Focused on backend development skills and enhanced understanding of PHP application structures.

- **Responsive Website with HTML & CSS** *SitePoint, 2016*
  - Mastered HTML and CSS fundamentals to build responsive websites from scratch.
  - Gained hands-on experience in creating visually appealing, functional, and mobile-friendly web layouts.

Education

- **Masters in Computer Science**, University of South Dakota *Expected May 2025*
  - ACM Club Member
  - USD Computing Club
  - BSA Treasurer

- **Bachelor in Computer Science**, Eastern University Bangladesh *August 2020*
  - EU Programming Club
  - EU Debating Club

Research

- **A Multimodal Analytical Approach to Alzheimer's Disease Diagnosis Using Machine Learning and Convolutional Neural Networks on MRI Datasets**
  Published by **IEEE**
  - Investigated early detection of Alzheimer's Disease using machine learning and deep learning techniques on the OASIS MRI dataset.
  - Employed models such as Random Forest, Logistic Regression, Extra Trees, and Convolutional Neural Networks (CNN), achieving the highest accuracy and AUC with CNN.
  - Demonstrated the importance of early diagnosis to enable timely interventions and improve disease management strategies.

- **An Ontological Framework for Lung Carcinoma Prognostication via Sophisticated Stacking and Synthetic Minority Oversampling Techniques**
  Published by **IEEE**
  - Developed a stacking ensemble model combining XGBoost, LightGBM, and CatBoost, achieving improved predictive accuracy for lung cancer detection.
  - Addressed class imbalance with Adaptive Synthetic Sampling (ADASYN) and applied feature selection techniques like RFECV and LASSO Regression to enhance model performance.
  - Optimized hyperparameters using Bayesian techniques with Optuna and validated robustness through Stratified K-Fold Cross-Validation, demonstrating clinical applicability.
- **Recondite Thyroid Pathology Prediction: Hermeneutic Integration of Neural and Machine Learning Architectures**
  Published by **IEEE**
  - Developed an ensemble model integrating CNN, TabNet, and machine learning algorithms like XGBoost, achieving 98.7
  - Addressed class imbalance using advanced preprocessing techniques and optimized performance through feature selection, hyperparameter tuning, and cross-validation.
  - Demonstrated the effectiveness of combining deep learning and ensemble approaches for early and accurate diagnosis of thyroid disorders, improving clinical decision-making.
- **Predicting Customer Sentiment in Social Media Interactions: Analyzing Amazon Help Twitter Conversations Using Machine Learning**
  Published by **International Journal of Advanced Science Computing and Engineering**
  - Analyzed customer interactions with Amazon's support account "@AmazonHelp" to predict changes in sentiment using various machine learning algorithms.
  - Employed models like K-nearest neighbor, SVM, and Bagging with RepTree, identifying K-nearest neighbor and SVM as optimal for balancing accuracy and F-measure.
  - Demonstrated the potential of sentiment analysis and machine learning for enhanced customer engagement strategies on social platforms.
- **Real-Time Vehicle and Lane Detection using Modified OverFeat CNN: A Comprehensive Study on Robustness and Performance in Autonomous Driving**
  Published by **al-kindipublisher**
  - Developed a modified OverFeat CNN model for high-accuracy, real-time vehicle and lane detection, achieving over 10 Hz on diverse GPU setups.
  - Utilized a dataset combining data from cameras, LIDAR, radar, and GPS to enhance robustness against occlusions and improve detection accuracy.
  - Highlighted the model's potential applicability in autonomous driving, paving the way for future advancements in the field.

References

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