Arghadeep Mitra

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QUALIFICATIONS SUMMARY

Data Science

- Proven success leveraging relevant technologies to produce key insights and drive informed decision making.
- Skilled at utilizing artificial intelligence, machine learning, and deep learning.

Software Development

- Functional knowledge of numerous programing languages and web development technologies.
- Project experience in application design and web development.

Communication

- Quick learner practiced in teamwork and stakeholder communication.
- Ability to multitask and prioritize workflow effectively.

EDUCATION

Doctor of Philosophy in Computer Science, 2020-Present
University of Missouri, Columbia

Master of Science in Computer Science, 2018-2020
California State University
San Marcos, CA
GPA: 3.51

Coursework: Artificial Intelligence, Deep Learning, Analysis & Intractability of Algorithms, Communication & Computer Networks, Advance Database & Management System, Internet of Things, Computer Security, Game Programming, Design Pattern & Object-Oriented Analysis

Bachelor of Technology in Computer Science and Engineering, 2014-2018
Techno India University
West Bengal, India
CGPA: 8.04/ 10

Certificate of Industrial Training Program on Dot Net, Oriens Infotech, 2017

TECHNICAL PROFICIENCIES

Programming: C, C++, C#, Java, Python, HTML, CSS, JavaScript

Frameworks: Microsoft .NET, Oracle JDK, Flask (Micro Web), Joomla, PhpMyAdmin

Tools: MySQL, Wireshark, Unity, Git, Anaconda, NumPy, Pandas, Scikit-Learn, TensorFlow, LabelIMg, OpenCV, PyTorch, Linux (Ubuntu), Mac OS

PROJECT HIGHLIGHTS

- **Identifying Malicious URLs**: Built web application with Python and Flask, utilizing logistic regression machine learning algorithm to identify and notify user with Good/Bad URL indication during browsing.
- **B-Healthy Expert System**: Created artificial intelligence application with SWI-Prolog, delivering personalized nutrition recommendations for user based on assessment questionnaire and specific health goals.
- **Stock Price Predictor**: Developed a Deep Learning Model for stock market prediction, leveraging Python, PyTorch, NumPy, Matplotlib, and RNN to determine future company stock value based historical data and technical indicators.
- **Garage Parking Sensor**: Completed IOT project creating obstacle detectors to notify driver of available parking spaces within garage, integrating ultrasonic range finding technology and a Nucleo controller to also locate vehicle within desired parking constraints.
- **Railway Reservation System**: Designed website to check train schedules and book/cancel tickets, utilizing HTML, PHP, SQL, Joomla, and phpMyAdmin for storing data.

EXPERIENCE HIGHLIGHTS

California State University, San Marcos, CA **10/2019 – 12/2020**
Software Developer / Graduate Research Assistant

Partner with research team to develop software supporting waste management research. Communicate with project stakeholders to gather requirements, conceive appropriate solution, and translate into actionable development scope. *Technical Scope: Python, TensorFlow, Faster R-CNN, OpenCV, LabelImg.*

- Developed software to reduce human labor while separating recyclables, detecting recyclable materials in trash bins and searching for contamination by non-recyclable materials.
- Leveraged Convolutional Neural Network and implemented machine learning algorithms utilizing visual images and photo recognition to design and build waste classification system.

Corteva Agriscience (formerly DowDuPont), Hyderabad, India **6/2019 – 8/2019**
Data Science and Informatics Intern

Completed design and development of application to assist associates and customers with training and utilization of machine learning algorithms. Wrote clean code and executed effective testing and debugging. Oversaw project planning, prioritized workflows, and produced results that met business needs. *Technical Scope: Python, Flask, TensorFlow, HTML, JavaScript.*

- Created Python web application on Supervised Machine Learning Pipelines with TensorFlow backend.
- Integrated enabling technology, empowering user to search algorithms on web server using specific data values.

PUBLICATION (under Review)

Title: **Detection of Waste Materials using Deep Learning and Image Processing.**
Authors: Arghadeep Mitra, Yanyan Li, Ahmad R. Hadaegh.
Publisher: MDPI AI