PRADYUMN PUNDIR

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EDUCATION

• Stevens Institute of Technology | Hoboken, NJ
Master of Science in Computer Science (GPA: Ongoing)

Jaypee University of Information Technology | Himachal Pradesh, India
 Bachelor of Technology in Computer Science
 (CGPA: 8.26/10)

SKILLS

- Languages & Database: Python, JavaScript, C++, HTML, CSS, Jinja, PostgreSQL, MySQL, Firebase
- Framework & Libraries: NumPy, Pandas, Scikit, TensorFlow, Keras, Bootstrap
- Other Skills & technologies: Machine Learning, Deep Learning, NLP, Flask, AWS EC2, Firebase Hosting

EXPERIENCE

FOSICA
Full-stack web development (Internship)

Punjab, India

February 2, 2021 - March 20, 2021

Implemented an advanced algorithm image distribution system for distribution of images to editors accordingly with a JavaScript program. Tech: Bootstrap, JavaScript, Firebase, Firebase Storage, HTML, CSS, Firebase Hosting. Collaborated with the Android App Development team for the Synchronization of the web and the mobile application.

ACADEMIC PROJECTS

MOFit Website Project (Python Flask Website)

- Website uses several Machine Learning algorithms to predict obesity levels, bodyweight, and fat percentage, Tech: Flask, Random Forest, Decision Tree, XGBoost, Extra Trees, KNN, JavaScript, Firebase, Jinja2
- Hosting: AWS EC2 connection through Putty Configuration (Website Link...)

Human Action Recognition

• Project includes a combination of modalities such as RGB, Depth, Skeleton, and Inertial Information to create a system for recognizing human actions, Tech: Python, Convolutional Neural Network (CNN), Recurrent Neural Network (RNN)

Malaria Prediction Website

• Implemented a Flask Website to check whether a cell is infected or not through Convolutional Neural Network (CNN), Tech: Flask, CNN, Python

RESEARCH EXPERIENCE

Towards a Multimodal System for Precision Agriculture using IoT and Machine Learning

• Discovered methods to improve crop productivity with less human intervention. through various machine learning algorithms such as Random Forest, LGBM, and KNN. Pre-Trained CNN models such as VGG16, Resnet50, and DenseNet121

MOFit: A Framework to reduce Obesity using Machine learning and IoT

• Built a framework using machine learning algorithms Random Forest, Decision Tree, Extra Trees, and KNN to predict obesity levels, bodyweight, and fat percentage levels, followed by the Hyperparameter optimization to increase model's accuracy

On CI/CD for Automated Deployment of Machine Learning Models using MLOps

• Study provides a more in-depth look at machine learning lifecycle as well as key contrasts between DevOps and MLOps. Includes tools and methodologies for executing the CI/CD pipeline of machine learning frameworks

PRESENTATIONS AND PUBLICATIONS

- [1] P. Pundir, and S Garg, "On CI/CD for Automated Deployment of ML Models using MLOps" AI and Knowledge Engineering, California, U.S.A, 2021
- [2] P. Pundir and S. Garg," MOFit: A Framework to reduce Obesity using Machine learning and IoT," 2021 44th International Convention on Information, Communication and Electronic Technology (MIPRO), Opatija, Croatia, 2021
- [3] P. Pundir, and S. Garg" Towards a Multimodal System for Precision Agriculture using IoT and Machine Learning," 2021 12th International Conference on Computing Communication and Networking Technologies (ICCCNT), Kharagpur, India, 2021