PRASANTH BUDDAREDDYGARI pbuddare@asu.edu

Computer science student pursuing a master's degree at Arizona State University with two years of work experience in design and development of big data pipelines and foundational datasets creation. Passionate about research and development in Computer Vision, Machine Learning and Artificial Intelligence. Seeking an internship to utilize my skills in solving complex real-world problems.

EDUCATION

MS in Computer Science — Aug 2019 – Present
Arizona State University, Tempe, AZ

B. Tech in Computer Science and Engineering — Aug 2013 – May 2017
National Institute of Technology, Warangal, India

WORK EXPERIENCE

- **Data Engineer – Target** — Jul 2017 – Aug 2019
  - Created automation process for validation and recovery of fulfillment centers operations data in Hadoop through Apache Oozie, Sqoop and Hive.
  - Enhanced data parser application to reduce the number of files writable to Hadoop Distributed File System and thereby increasing the Hive query performance.
  - Created certified datasets based on business rules in Hive that are used by more than 5 teams across the enterprise.
  - Implemented data pipelines for the real time movement of big data with StreamSets open source tool.
  - Developed UI of team member learning website using React JS.
  - Deployed code by continuous integration and continuous deployment using Git, Drone and Docker.

PUBLICATIONS

- Bhukya R, Prasanth B, Vihari VS, and Ajay Y (2017). **Detection of acute lymphoblastic leukemia using microscopic images of blood.** International Journal of Advanced and Applied Sciences, 4(8): 74-78

PROJECTS

- **Predicting house prices** — Apr 2019
  - Implemented data preprocessing, training and k-fold cross validation on house prices dataset in Kaggle.
  - Developed using NumPy, Pandas, Matplotlib and Apache MXNet with a two-layer neural network and ReLU activation function.
- **Softmax regression on fashion MNIST dataset** — Mar 2019
  - Implemented softmax regression from scratch to classify clothes on fashion MNIST dataset.
  - Developed in python using NumPy, Matplotlib and Apache MXNet.
- **Optical character recognition using Naïve Bayes classification** — Feb 2019
  - Implemented on MNIST dataset with Naïve Bayes classifier using the method of maximum likelihood.
  - Developed in python using NumPy, Matplotlib and Apache MXNet.
- **Iris flowers classification** — Dec 2018
  - Implemented data preprocessing, visualization and feature engineering techniques using NumPy, Pandas, Scikit-Learn, Matplotlib, and Seaborn.
  - Implemented logistic regression in TensorFlow framework and achieved a model accuracy of 95.5%.
- **Steganography for hiding text in images** — Jan 2017 – Apr 2017
  - Implemented canny edge detection method to find out edge of image using Java.
  - Encrypted sensitive text using AES and replaced image edges nibble with secret text nibble.
  - Produced better results in terms of image quality after hiding compared to other techniques.
- **Detection of Acute Lymphoblastic Leukemia** — Aug 2016 – Jan 2017
  - Datasets of microscopic blood images were obtained from Università degli Studi di Milano, Italy.
  - Extracted features such as area, perimeter, circularity, solidity etc. from the blood images.
  - A support vector machine model is trained on the features to classify healthy and unhealthy cells.
  - Developed algorithms using C++ language and OpenCV Library.

- **Attendance management system** May 2016 – Jul 2016
  - Developed an android application to manage attendance of a class with login features.
  - Implemented in android studio using Java language and SQLite as database.
- **Alumni news website** Feb 2016
  - Scrapped news feeds using beautiful soup python library and trained a natural language processing model to find school relevant articles.
  - Developed the website using python language and flask framework.

TECHNICAL SKILLS

Programming languages – Python, Java, C++, SQL, Shell
Big data technologies – Hadoop, MapReduce, Hive, Sqoop, Oozie, Spark
Artificial Intelligence – Computer Vision, Machine Learning, Deep Learning, Classification
Frameworks/Applications – PyTorch, Apache MXNet, TensorFlow, Scikit-learn, Jupyter
Web development – HTML, CSS, Node JS, React JS
Tools – Git, Drone, Docker, OpenStack

RELEVANT COURSEWORK

Computer Vision, Machine Learning, Statistical Learning, Data Mining, Data Processing at Scale, Distributed Computing, Data Warehousing, Database Management Systems, Cloud Computing, Object Oriented Programming, Data Structures and Algorithms, Problem Solving and Computer Programming, and Software Engineering

HONORS AND AWARDS

- Quarterly award as a part of Be One Team at Target Apr 2018 – Jun 2018
- Recognized with Pyramid award for outstanding contributions at Target May 2018
- National merit scholarship Aug 2013 – May 2017
  - Received at National Institute of Technology, Warangal for securing an All India Rank of 1506 in Joint Entrance Examination Mains.