

Priyanka Tanpure

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EDUCATION

Binghamton University, State University of New York, Thomas J. Watson College of Engineering and Applied Science Dec 2021
Master of Science in Computer Science GPA: 3.90

Courses: Machine Learning, Data Mining, Database Systems, Design Patterns, Programming Systems and Tools, Design and Analysis of Computer Algorithms, Programming Languages, Computer Organization and Architecture, Operating Systems

Savitribai Phule Pune University Jun 2016
Bachelor of Engineering in Computer Science GPA: 3.50

TECHNICAL KNOWLEDGE

Programming Languages: Python, C, C++, Java, PL/SQL (Sequence, Triggers, Procedures, functions)
Databases: MySQL, MongoDB, Oracle
ML Libraries: Pandas, NumPy, Scikit-Learn, Matplotlib, TensorFlow, PyTorch, CUDA
ML Techniques: Supervised Learning (Decision Tree, Naïve Bayes, Neural Networks, SVM, Logistic Regression KNN), Unsupervised Learning (K-means clustering), Time Series Analysis (ARIMA, SARIMA), Natural Language Processing (NLP), Deep Learning (Convolution Neural Networks - CNN)
Tools and Frameworks: Git, Hadoop (HDFS, Sqoop, Hive), Spark (familiar), Data Visualization Tools (Power BI, Tableau)
Other: Unix Shell Scripting, Jenkins, Postman, Web Technologies (HTML5, NodeJS, JavaScript)

WORK EXPERIENCE

Binghamton University, Binghamton, NY, USA Jun 2021 - Present
Graduate Research Assistant, Department of Computer Science

- Working on research projects in Machine Learning, training Convolution Neural Network for biomedical images.
- Classification of Optical Coherence Tomography (OCT) as Normal, DME, Drusen, CNV and pneumonia detection using x-ray.

Amdocs Development Center India, Pune, India Jul 2016 - Jul 2019
Software Test Engineer

- Worked in sustainment team for same to recreate, retest production issues, and did regression testing which reduces 80% of chances of code break in production. Tested entire module of UAT (User Acceptance Testing), PRM (Partner Relationship Management) and automated PRM regression testing flow which reduced 40% of manual work
- Participated in Billing, MPS (Message Processing System) and PRM new functionality design, execution, and defect identification
- Spearheaded guiding and rating of voice usages in team and point of contact for the teams with voice usage issues
- Appreciated by clients for providing on-time delivery with zero defects and quality of work and have been awarded by team manager as the best performer in three production releases
- Received the Gold Medal in GINGER (Automation tool) UNIX automation for automating voice usage flow
- Worked in client time zone in Mexico for AT&T Mobility Project 1806(Jun 2018) production release

Vision Software Development, Pune, India Apr 2016 - Jul 2016
Software Development Intern

- Designed and developed an Android and web application with JAVA, Eclipse IDE, J2EE platform, and Android Studio that would help users search for hospitals and blood banks in their nearby vicinity. The app would also notify users about blood donation camps that would be organized, the GPS functionality provides accurate location service
- Developed a blood management infosystem as web version of application to manage the records of donors and receivers

NOTABLE PROJECTS

Deep Neural Network (Python, Nvidia CUDA, PyTorch) Jun 2021

- Achieved accuracy of 94.6% in recognizing handwritten digits by building a deep neural network of 1024 neurons in hidden layer to train 60K and test 10K handwritten digits in Python
- Reduced training and testing time by more than 60% by implementing multithreading on GPU with Nvidia CUDA

Fake News Detection (Python, Scikit-Learn, NLTK) Nov 2021

- Built models on training dataset with ML algorithms and evaluated using Confusion matrix, Accuracy score, F-score, AUC
- CountVectorizer: Naïve Bayes (93.53%), PassiveAggressive (95.38%), SVM (95.19%), Logistic Regression (95.48%)
- TfidfVectorizer: Naïve Bayes (93.27%), PassiveAggressive (96.27%), SVM (96.06%), Logistic Regression (96.08%)
- Naive Bayes did not give accuracies as good as those obtained from SVM, Logistic Regression and Passive Aggressive Classifiers. Of all the four SVM is a good choice since it tries to maximize the margin and make the model more generalized for unseen data

Time-series Analysis of E-commerce Data (Python, SARIMA Model) Feb 2021

- Analyzed e-commerce data and predicted future sales for 29 days of 100 key products combined and independently

COVID19 Tweeter Data and Sentiment Analysis (MongoDB, MapReduce, NodeJS, Natural) Nov 2020

- Analyzed unstructured Covid-19 twitter data (0.5 million records) and performed sentiment analysis using NodeJS NLP
- This analytical model helps people to get useful information and helps in guiding people around this pandemic outbreak