Revathy Narayanan

(716) 218-6142 | revathynarayanan98@gmail.com | github.com/revathynarayanan98| linkedin.com/in/revathynarayanan/ | revathynarayanan.com

EDUCATION

University of Buffalo   New York, United States
Master of Science in Computer Science   Jan 2020 - May 2021
Major: Software and Information Systems

Amrita Vishwa Vidyapeetham   Tamil Nadu, India
Bachelor of Technology in Computer Science and Engineering   Jul 2015 - May 2019

SKILLS

Programming languages:	Java, Python, JavaScript, HTML, CSS, Ajax, UNIX.
Database:	SQL, Hadoop, Spark, MongoDB, Google Firebase, AWS S3.
Framework and libraries:	Flask, Node.js, Django, Laravel, jQuery, Bootstrap, Scikit-learn.
Development and Testing Tools:	AWS, Android Studio, Selenium, JUnit, Tableau, MySQL Workbench, Git, Docker.

EXPERIENCE

Undergraduate Student Researcher   Tamil Nadu, India
Amrita Vishwa Vidyapeetham   Jan 2018 – Dec 2018

- Investigated the malignancy and severity of Breast Cancer in patients by using Gaussian Naive Bayes and K Neighbors Classifier.
- Developed a Web Application with Python and Flask to show graphical results.
- Advanced Skills: Machine Learning, Python, Flask, HTML, CSS.

PROJECTS

Proximity Marketing | Github

- A product recommender system which suggests relevant items based on users' purchase pattern and provide attractive offers.
- Tested among a group of 60 users' and observed an 35% increased click-through rate.
- Worked on RFM clustering using K-means.
- Implemented using Python, Flask, Pandas, scikit-learn, NumPy and Cassandra.
- Used Future Groups dataset for Big Data Analysis.

IoT-enabled Smart Dining Environment | Github

- A device built with a combination of 4 sensors and a Android tablet capable of fixed-axis 360 degree rotation to face users based on touch sensor input or automated with sonar sensors.
- Worked on Android application for user and built website for order management.
- User-side: Android Application, Arduino Uno, Nema-17 stepper motor, TTP223 touch sensor, HC-05 Bluetooth module.
- Management-side: Bootstrap, JavaScript, HTML5, CSS3, Firebase.

Cloud Computing Projects | Github

- Worked on AWS/ Microsoft Azure/ GCP using Python and Flask.
- Libraries and concepts applied: Auto-scaling, Load Balancer, Caching, Virtual Machines, JMeter, Google Charts, Scikit-learn etc.

Budget Analysis System w/ Python Flask | Github

- Analysis of IMDB movie data set with clustering and data visualization.
- Build a web application with Python, Flask.
- Packages and Libraries used: NumPy, pandas, Matplotlib, seaborn, jinja2.

Smart Recipes

- An Item-based Collaborative filtering recommender system to match ingredients available to user's to total ingredients required and rank from best matched to least.
- Built a simple web crawler with max depth of 3 to populate data set of recipes.
- Implemented using Android, Firebase platform for event tracking and Big Data Analytics, BigQuery for interactive analysis of massive datasets, and Pandas.

Aarakshan - Railway Reservation System | Github

- Built an Android application, Web application for patrons to manage their reservation, and Python GUI for admins to manage patrons.
- Implemented using Android, Python, Node.js-express, PostgreSQL.

Multicast Messenger w/ Total and FIFO ordering | Github

- Designed and implemented a multicast messenger mobile application exploring Total and FIFO ordering.
- Implemented using Android, MySQL.

Aakhyaan - Email Application | Github

- Built an Android application which implements email functionality using Firebase.
- Worked on sending/receiving of emails and Firebase authentication to securely store users' data in the cloud.
- Implemented using Android(Java), Firebase, fragmentation techniques.

PUBLICATION & CONFERENCES

H. Murugesan, Revathy, N., and Mathi, S. K., "IoT-enabled service management system for smart dining environment", Journal of Advanced Research in Dynamical and Control Systems, vol. 11, pp. 1823-1828, 2019. [View Paper]   Jan2018 - Feb 2019

ICAECT International Conference 2019 – Presented research paper and commended as best paper.   Feb 2019