Prateek Parab

Tel: (312)-478-5117 | pparab@hawk.iit.edu | Sunnyvale, CA| LinkedIn |GitHub| Portfolio

SUMMARY

Focused, quick-learning and highly technical professional with superior multitasking abilities, high adaptability and pro team player qualities with excellent communication skills. Delivering value.

EXPERIENCE

Software Engineer, EAGL Technology - Albuquerque, NM　　　　　　　　　　　　　　Jul 2019 – Present
- Successfully implemented a mobile app using Xamarin (C#) and Firebase cloud messaging platform.
- Deployed an integration server on cloud using Asp.net, RESTful API's implementing design patterns and object-oriented design to maximize efficiency and avoid code repetition.
- Devised an algorithm to read inputs from multiple IOT devices using Python, RESTful API's, SQL and parallel processing to run 20+ devices with latency as low as 200 milliseconds and deployed it as a microservice.
- Built a real-time weapon detection system using machine learning, Google cloud ML services and Python.
- Built an NFC mobile app (iOS/Android) using Xamarin (C#), Asp.net and MVC frameworks. Link: Cityweb app
- Implemented an efficient triangulation algorithm with an accuracy of 99.998% in Python and integrated with Google maps API.
- Built a desktop notifier using C#, RabbitMQ and deployed the RMQ server in a Digital Ocean droplet(cloud).
- Built a media server using Opencv-python, Flask supporting various streaming protocols, low latency with multiple streams.
- Architected and built a JWT auth server using ASP.net, RESTful API's, SQL for a secure interface to all other applications.
- Deployed highly scalable Authentication server and Media server on cloud and connected to a remote PostgreSQL db.
- Migrated company's proprietary IOT sensor code from C to Golang and optimized the same for high performance.
- Evaluated every line of code with Unit testing incorporating NUnit framework and unit and integration test in python.
- Exploited tools like Jira, Git, Jenkins and Docker.
- Deployed a Key mgmt. portal in Flask, JavaScript, Ajax, jQuery and deployed it as a microservice on Docker.

Software Development Intern, Ubees Inc. - New York, NY　　　　　　　　　　　　　　Jul 2018 – Jan 2019
- Developed a cross platform app in React native with app size (< 40 MB)
- Built an efficient tracking algorithm utilizing location services using Java in android studio.
- Implemented highly scalable endpoints using express framework in Node.js.
- Captured and stored RT sensor data in MongoDB.
- Successfully migrated data from MongoDB to PostgreSQL to support ACID properties.

Software Development Intern, Larsen & Toubro – Mumbai, India　　　　　　　　　　　Dec 2016 - Jan 2017
- Implemented progressive web app using. Node.js, html, JavaScript.
- Developed an interactive chatbot using Microsoft QnA maker api.
- Developed a chatbot using Dialogflow and deployed on Facebook.

SKILLS

Technologies:	Python, Java, C#, C++, JavaScript**,** React, Node, HTML5, CSS, Bootstrap, MongoDB, Pytorch, Node.js, SQL, AWS, Django**,** Flask, PostgreSQL, Docker, Golang, Jira, GCP, Firebase, Redis, .
Tools:	Eclipse, Postman, Jupyter nbk, VS code, Android studio, MS Project, Xcode, Portainer, Git.

EDUCATION

Illinois Institute of Technology, Chicago, IL　　　　　　　　　　　　　　　　　　　Aug 2017 - May 2019
Master's in Computer Science
Coursework: Algorithm's, Big data, ML, Distributed Systems, Mobile app dev, Web apps, Image processing.

Mumbai University, Mumbai, India　　　　　　　　　　　　　　　　　　　　　　　　Jul 2013 - Aug 2017
Bachelor's in Computer Science
Coursework: Theory of Computation, Data Structures, OS, Computer networks, OO programming, AI.

PROJECTS

Dockerized Node.js application:　　　　　　　　　　　　　　　　　　　　　　　　　　Sept 2020
- Developed a highly scalable in memory movie genre database.
- Created endpoints with CRUD operations using express framework implementing the concept of promises.
- Created a dockerfile with base image as node, performed necessary port mappings, used git for version control.
- Used Postman to test all the resp. scenarios and deployed the project on docker registry.

Deep learning object classification using Back propagation　　　　　　　　　　　　　Feb 2019
- Implemented pre-processing operations such as reshaping, flattening and created an image vector.
- Built 2 models i) A 2-layer neural net ii) L-layer deep neural network.
- Implemented forward and back propagation from scratch in Python and generate trained parameters.
- Used trained parameters to predict labels and achieved 90% accuracy.

Implementation of facial recognition with transfer learning　　　　　　　　　　　Aug 2018 - Dec 2018
- Developed a neural net from scratch using Python, Tensorflow and Keras.
- Performed data transformation and loading on the dataset from Kaggle.
- Trained the neural net for those datasets and calculated precision, recall, accuracy.
- Implemented transfer learning and achieved higher accuracy by accurately tuning hyperparameters.

CERTIFICATIONS

- Neural networks and Deep learning, Natural language processing, Machine learning (recommender systems)
- Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization.
- Full stack web development, Blockchain essentials, Tableau