

# PrateekParab

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## 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

<b>Software Engineer, EAGL Technology - Albuquerque, NM</b>	Jul 2019 – Present
<ul style="list-style-type: none"><li>Successfully implemented a mobile app using Xamarin (C#) and Firebase cloud messaging platform.</li><li>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.</li><li>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.</li><li>Built a real-time weapon detection system using machine learning, Google cloud ML services and Python.</li><li>Built an NFC mobile app (iOS/Android) using Xamarin (C#), Asp.net and MVC frameworks. Link: <a href="#">Cityweb app</a></li><li>Implemented an efficient triangulation algorithm with an accuracy of 99.998% in Python and integrated with Google maps API.</li><li>Built a desktop notifier using C#, RabbitMQ and deployed the RMQ server in a Digital Ocean droplet(cloud).</li><li>Built a media server using Opencv-python, Flask supporting various streaming protocols, low latency with multiple streams.</li><li>Architected and built a JWT auth server using ASP.net, RESTful API's, SQL for a secure interface to all other applications.</li><li>Deployed highly scalable Authentication server and Media server on cloud and connected to a remote PostgreSQL db.</li><li>Migrated company's proprietary IOT sensor code from C to Golang and optimized the same for high performance.</li><li>Evaluated every line of code with Unit testing incorporating NUnit framework and unit and integration test in python.</li><li>Exploited tools like Jira, Git, Jenkins and Docker.</li><li>Deployed a Key mgmt. portal in Flask, JavaScript, Ajax, jQuery and deployed it as a microservice on Docker.</li></ul>	
<b>Software Development Intern, Ubees Inc. - New York, NY</b>	Jul 2018 – Jan 2019
<ul style="list-style-type: none"><li>Developed a cross platform app in React native with app size (&lt; 40 MB)</li><li>Built an efficient tracking algorithm utilizing location services using Java in android studio.</li><li>Implemented highly scalable endpoints using express framework in Node.js.</li><li>Captured and stored RT sensor data in MongoDB.</li><li>Successfully migrated data from MongoDB to PostgreSQL to support ACID properties.</li></ul>	
<b>Software Development Intern, Larsen &amp; Toubro – Mumbai, India</b>	Dec 2016 - Jan 2017
<ul style="list-style-type: none"><li>Implemented progressive web app using. Node.js, html, JavaScript.</li><li>Developed an interactive chatbot using Microsoft QnA maker api.</li><li>Developed a chatbot using Dialogflow and deployed on Facebook.</li></ul>	

## SKILLS

<b>Technologies:</b>	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, .
<b>Tools:</b>	Eclipse, Postman, Jupyter nbk, VS code, Android studio, MS Project, Xcode, Portainer, Git.

## EDUCATION

<b>Illinois Institute of Technology, Chicago, IL</b>	Aug 2017 - May 2019
Master's in Computer Science	
Coursework: Algorithm's, Big data, ML, Distributed Systems, Mobile app dev, Web apps, Image processing.	
<b>Mumbai University, Mumbai, India</b>	Jul 2013 - Aug 2017
Bachelor's in Computer Science	
Coursework: Theory of Computation, Data Structures, OS, Computer networks, OO programming, AI.	

## PROJECTS

<b>Dockerized Node.js application:</b>	Sept 2020
<ul style="list-style-type: none"><li>Developed a highly scalable in memory movie genre database.</li><li>Created endpoints with CRUD operations using express framework implementing the concept of promises.</li><li>Created a dockerfile with base image as node, performed necessary port mappings, used git for version control.</li><li>Used Postman to test all the resp. scenarios and deployed the project on docker registry.</li></ul>	
<b>Deep learning object classification using Back propagation</b>	Feb 2019
<ul style="list-style-type: none"><li>Implemented pre-processing operations such as reshaping, flattening and created an image vector.</li><li>Built 2 models i) A 2-layer neural net ii) L-layer deep neural network.</li><li>Implemented forward and back propagation from scratch in Python and generate trained parameters.</li><li>Used trained parameters to predict labels and achieved 90% accuracy.</li></ul>	
<b>Implementation of facial recognition with transfer learning</b>	Aug 2018 - Dec 2018
<ul style="list-style-type: none"><li>Developed a neural net from scratch using Python, Tensorflow and Keras.</li><li>Performed data transformation and loading on the dataset from Kaggle.</li><li>Trained the neural net for those datasets and calculated precision, recall, accuracy.</li><li>Implemented transfer learning and achieved higher accuracy by accurately tuning hyperparameters.</li></ul>	

## CERTIFICATIONS

<ul style="list-style-type: none"><li>Neural networks and Deep learning, Natural language processing, Machine learning (recommender systems)</li><li>Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization.</li><li>Full stack web development, Blockchain essentials, Tableau</li></ul>	
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