Manoj Narayan Bisarahalli

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Experience

Parkaze Inc.   Boston, MA
Software Engineering Intern   May 2020 - August 2020
- Worked as a full-stack intern on Parkaze's mobile/web app team following Agile methods of development.
- Fabricated a robust and reliable product after taking it over from three developers while maintaining the speed of deliverable in a single sprint; completing 2.5 times more tasks.
- Refactored the existing code base, reducing it's size by over 40% and introduced test-driven development that increased the reliability of the app by a significant margin.

GeekyAnts   Bangalore, KA
Software Engineer   Sep 2017 - May 2019
- Diligently administered several teams of varying sizes and delegated work appropriate to the individual to build solutions critical to the company.
- Pioneered the adoption of Flutter in the company and contributed to several Open Source projects. Co-author of "Flutter for React-Native developers" section of the official Flutter documentation.
- Lead developer for Konduko-StandApp project where I used Firebase ML vision APIs in combination with the camera to enable the app to detect barcodes, a method unique to the budding Flutter community. Made use of RESTful APIs to communicate with the backend. Deployed on the App Store and Play Store.

Aplynk   Bangalore, KA
Software Engineering Intern   Jan 2017 - March 2017
- Engineered a bridge between cloud components like E-Commerce Platform, CRM, and other Business Critical components to ensure real time data consistency, an iPaas service written in **Java**.

Projects

REST API using Django (Django REST Framework, Python, MySQL)
- A personal endeavor as a project lead and developer, to provide REST APIs to other team developers in the ACM project for the Fall 2020 semester.
- Developed and deployed a server that exposes REST API to mobile clients. Implemented CRUD endpoints that uses a MySQL database to store and retrieve lists of checklists.
- Incorporated template driven patterns in Views, Serializers and Models with the use of templates such as ListCreateAPIView, ModelViewSets and Model.

Parkaze App (Dart, Flutter, Firebase, Cloud Functions, Trello, Bloc)
- Developed a production ready, scalable full-stack solution called Pakaze; built using Flutter, Firestore db, cloud functions for notifications, email/password auth, db events and payment functionality using Stripe.
- Adopted common data structures such as Sets, Stack for maintaining unique markers on the Map and search/sort algorithms for search field and sorting list of items to be displayed.
- Managed time and delivered new app versions every two weeks spending only 480 hours for an estimated complexity of 767 hours and finished over 130 tasks spread across 6 Sprints while following test-driven, documentation rich and iterative development process.
- Accelerated the integration of mobile/web app databases with experiments in docker containers, micro-services.

Deep Music (Python, CNN-RNN, Keras, XSEDE cluster, GPU, Google Colab)
- Trained a Neural Net using the FMA dataset to classify songs into genres. The network architecture involves use of a combination of CNN and RNN called CRNN.
- Utilized techniques such as parameter optimization, back propagation, regularization methods (Dropout layers, weight decay and batch Normalization) and gradient descent algorithm (Adam, SGD, RMSprop).

Bot influence in Social networks (Python, Flask, HTML/CSS, Twitter API, ML algorithms)
- Collected live Twitter user data, both verified and un-verified users. In addition, I also collected replies to each of their tweets and Tf-Idf was used to analyze the frequency and diversity of individual words in tweets and replies.
- Trained two models using Logistic regression, Decision trees and validated using K-fold cross validation.

Education

Illinois Institute of Technology   Chicago, IL
Master of Computer Science *GPA: **3.83/4.0***   August 2019 - December 2021
Relevant Coursework: Computer Networks, Design and analysis of Algorithms, Advanced Database Organization

SJB Institute of Technology   Bangalore, KA
Bachelor of Information Science and Engineering   2014 - 2017

Skills

Programming Languages:	Python, Java, Dart, HTML/CSS, C++, JavaScript, SQL
Frameworks and Libraries:	Flutter, Keras, TensorFlow, Django
Technologies:	AWS, Lambda, Firebase, Git, REST API, HTTP,
Architectures and SDLC:	MVVM, Micro-service, MVC, Agile Methods, Sprint planning
Algorithms and DS:	Sort, Search, BFS, DFS, Stack, Queues, Arrays, Sets, Trees, Linked lists and Hash Map

Awards

John Deere's Environmental Challenge   Boilermake VII Hackathon
Recognized as a creative and thoughtful project in the category   Jan 26, 2020