Divij Sehgal

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EDUCATION

Delhi Institute of Technology and Management, Sonipat
Bachelor of Technology, Computer Science and Engineering(2013-2017, C.G.P.A. 7.48/10.0)

Key Coursework: Data Structures, Database Systems, Computer Networks, Theory of Automata & Computation, Operating Systems, Design and Analysis of Algorithms, Cloud Computing, Distributed Operating Systems, Object Oriented Programming, Artificial Intelligence, Software Project Management & Engineering Economics

EXPERIENCE

Co-founder, Aidetic Software   July, 2018 - Present
An organization that build tools and solutions using Artificial Intelligence to solve real-world Problems.

Involved in Planning, Market Analysis and Product Development.

Product: Video Analytics for Retail Sector. Following are my areas of contribution on the product:

- Developed a Facial Recognition/Clustering module for clustering unknown faces and extracting representatives features for each individual. A Deep Neural Network was used for Facial Feature Generation and online clustering was achieved through an incrementally updating clusters obtained by the DBSCAN Clustering algorithm in realtime.
- Implemented person re-identification module for in-store customer tracking.
- Prototyped and developed Beta Version as a web based interface aiming for easier accessibility and visibility.

Full Stack Developer, FlytBase Inc, Pune   Oct, 2017 - May, 2018
Development of software centered around drone based applications.

Analysis, design, development, testing and deployment on various Internal as well as Custom Software Projects.

- Improvements and Bug Fixes to Flytbase's Cloud Architecture and Web Applications as well as User-facing documentation.
- Revamp of Flytbase's cloud and APIs backend toward a microservices based architecture using Django as the application framework, following API Gateway Pattern for access to the backend and Database per service pattern for persistence purpose.
- Developed an integration with Chargebee(A subscription billing platform) and Stripe to evolve the platform as a Self service offering. This added integrated billing and subscription creation for Flytbase's Product and applications, to evolve it as a self-service offering, streamlining user on-boarding and eliminating the need for customers for manual contact for using off-the-shelf features of the product.
- Developed a Proof-of-Concept for real time video streaming application over RTP/RTMP protocols using the Wowza Streaming Engine. The application lets a drone user stream live video from a camera present on the drone, which they can access on demand through a web browser or stand alone software via an open RTMP stream.
- Developed a platform for drone based inspection of Telecom Towers in the United States. The application was developed and deployed in a multi-container setup and utilizes Python/Django/Numpy/Gunicorn, Javascript frameworks such as jQuery, CesiumJS, MySQL(MariaDB) for persistence as well as Amazon S3 for Blob Storage.

Intern, HT Media, New Delhi   Jan-July, 2017
Web development using The Django Framework, Celery, AngularJS, MySQL, ELK Stack, Postfix MTA.

Summer Intern, Bharat Petroleum, Mumbai   June-August, 2016
Development of backend components based on Enterprise Java as well as Development of a Push Notification Mini-Platform built using Firebase and Android SDK.

PROJECTS   College Notification System   Oct 2016 - May 2017
Utilizing the power of Push Notifications and Android, built an Notification System for managing flow of information around College Campus, among Student and Faculty Members.

Role: Development of Frontend, Backend components using Android SDK, AngularJS, MySQL and Django and deployment on AWS.

Bistro Bookie Bot   April, 2017
A simple, command based restaurant reservation system built using Django, Google App Engine, Google Datastore and Google Memcached, deployed on Telegram.

The bot has an interface similar to the one used by Apps such as Zomato and Swiggy to chat with their customer support, based on commands and user inputs in ways similar to those menus.

SKILLS
Programming   Python, Java, JavaScript, C++, MySQL, PostgreSQL, SQLite, Typescript, HTML, CSS.

Frameworks &   Django, jQuery, AngularJS(1, 4/5), Android SDK and related libraries, NumPy,
Libraries   Pandas, Flask, Chart.js, Tensorflow, Scikit-learn, OpenCV, Dlib.

Platforms &   Linux, Containerization, Docker, Distributed Systems, Microservices, Elasticsearch,
Paradigms   ELK Stack, Asynchronous Applications, Celery, RabbitMQ, Postfix, Octave, Video Streaming Protocols, FlytOSe(Subscription Billing), GPU/CUDA enabled applications.

ACHIEVEMENTS
AND HOBBIES
- Completed Professor Andrew Ng's course on Machine Learning by Stanford University, offered through Coursera, in February 2018
- Winning Team - Drama Competition, Annual Fest, 2014.
- Co Host and Comparee, Interdepartmental Cultural Event, 2014.
- Ranked 1st and 2nd in School at National Informatics Olympiad during years 2011 and 2012 respectively.
- Cycles, Swims, plays Billiards and participates in Meetups, Occassional reader.