ADITYA DUA

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Working on New Stacks, Frameworks and Languages Fascinates me. Writing Clean, Organized & Efficient Code. Almost all of my work is Available on my Github.

Education:

B.Tech. in Computer Science

2013 - 2017

Jaypee Institute of Information Technology

A-10, Sector-62

Noida, India

Skills:

- Android OS |
- Python & Django |
- Ruby & Rails Development Framework |
- Java SE and the JVM |
- Gradle and Maven build workflow |
- Working with Various VCSs like git, mercurial etc. |
- Modern Application Design Patterns |
- SQL and NoSQL databases like Oracle, MySQL, MongoDB |
- HTML5, CSS3, AngularJS, Basic JQuery |
- Java EE (Implementing applications based on JMS, JPA, Hibernate and various frameworks like Struts and Spring) |

- JavaScript Stack (Node.js, express.js) |
- XML XSLT DTDs etc. |
- Deploying Web Apps in a Container and Elastic Environments. Handling Deployments for Scale on AWS, App engine, Compute Engine. |
- Containerizing WebApps based on JS and Rails for a Clean Env. |
- C/C++ |
- PHP |

OS: Macintosh, Windows, Linux

Tools:

- Eclipse
- Sublime Text, Textmate
- Android Studio
- Sketch | UI prototyping
- Jetbrains IDEs (IntelliJ, RubyMine, PyCharm, WebStorm)

Experience:

OWASP Seraphimdroid | Android Developer Intern | Google Summer of Code 2016

May 2016 - August 2016

- Integrated a Knowledge Base into the App which provides the Users with Articles based on Android Security and User Security
- The App has been designed to be Offline First using WebView Caching and Database Caching
- The REST API and the Admin Platform has been written from Scratch using Ruby on Rails and Bootstrap
- More Info here
 - o https://github.com/addiittya2006/owasp-educate
 - https://github.com/nikolamilosevic86/owaspseraphimdroid/commits/gsoc?author=addiittya2006

Fundsofhope.org | Backend, Mobile Solutions

April 2015 - Present

• We are a Small team of Four People in the process of Launching this as a Commercial Project which basically supports Crowd Funding from the Public for the Public NGOs as our Clients

Parlush | Android Developer

April 2016 - July 2016

• Developed an Android App for the Platform as a Contract Developer developing an App from Scratch with the Latest Design Guidelines from Google.

• Developed a Backend for the App using the Django Framework working with models finally building a REST API

Delhi Nerds | Mobile DevOps | Freelance Work

April 2016 - July 2016

 Consulting regarding the Mobile Development for Newer and Emerging Startups and Developing Mobile Based Applications for them with a Scalable Backend

Projects:

1. C++ & Data Structures | C++, Java

- Using Data Structures and Concepts, Developed a ticket booking implementation. *
- Similar Implementation of a Hotel Reservation System. (partial Java) *

2. Algorithms & OOPS | C++, Java

- Implemented a Travel Agency Trip Planner in Group of 3 with partial Java Implementation using various shortest path and TSP Algorithms. *

3. Databases | PHP, MySQL

Implemented an E-commerce Website Backend using basic PHP and MySQL Database
Triggers and cursor Implementation with use of PHP's various features like sessions etc. *

4. OS | Java, Android

- Worked on a chat messaging and server communication tool using AMQP and RabbitMQ (using lib.s) *
- Worked on Android handling API's for an App using AsyncTasks with minimal network Calls

5. Theory of Computation | Java

- Developed a Basic General Lexical Analyzer using DFA concepts in Java *

6. Compiler Programming | Java

Developing a Ruby Interpreter with the help of Java using Swing <Incomplete> *

7. Web Technology

- Fundsofhope.org | Node.js Express Angular Polymer | Team of 4
 - i. Implementing a new Organizational Model for Easy Access for the NGOs to make more Money in India due to an impossible outreach
 - ii. Here Customers can Fund the projects and track progress made by the NGO on the project to which they are contributing.

- iii. Developing a Website Frontend using Modern Design Elements Bootstrap, Polymer, Angular.
- iv. Developing a Backend with a full Javascript Stack with a NoSQL DB which is Mongo and Auth. using JWT.

- Fundsofhope.org | Django (Under Development)

- We ported our Backend from a JS Stack to a Python Based Stack for more Familiarity
- ii. Ported the previously available Models to Django and Deployed on AWS EC2Container (Now on a Virtual Machine on DigitalOcean)

- Historewind | Javascript, Python, Nginx

- i. Developed a progressive web application with caching to display the significance of the date in History.
- ii. Wikipedia scraping using bs4 and ranking and displaying the most important events in history on date

- Parlush | Django (Code Unavailable)

- i. Basic Django REST API using Django REST Framework as a companion to the App
- ii. Implementing Cookies, sessions and understanding Django and its Scalability as a platform

8. Mobile Computing

- Healthkeep | Android | Team of 2

- Developing an Android App for the Users to keep track of the Calories Consumed during the Day and recording and Suggesting the Calories left
- ii. Uses the Google Fit History API to Store & Gather the workout and Calories for the End user
- iii. Available on the Play Store

Fundsofhope.org | Android | Team of 2

- i. Developing an Android app for the Platform using the REST API built with Express
- ii. API Calls in the App using Third Party Libraries like Volley and Image Handling using Picasso
- iii. Implementing Material Design UI fetching the latest from Google's Design Principles

- Fundsofhope.org v2 | Android (Under Active Development) | Team of 2

- i. The redesign of Application to include more user immersive experience
- ii. The Study and Implementation of Many third Party Libraries such as Retrofit etc.

- Parlush | Android (Code Unavailable)

- i. Basic Android Application with minimal UI according to Google's design principles
- ii. Attempt to duplicate the UI as put forward by client and API calls using Volley

^{*} Projects marked with an * are College Credit Projects done in Groups

Courseware:

Core Subjects:

- Mobile Computing
- Mobile Application Development
- Cryptography & Network Security
- Data Structures Basic + Advanced
- Operating Systems
- Computer Networks
- Unix: The Operating System
- Algorithms
- Database Management
- Theory of Computation
- Web Technologies
- Compiler Programming
- Data Compression
- Multimedia Design: Illustrator & Photoshop

Open Courseware:

- Taken and studied various MOOCs based on Mobile Computing
 - Constructing Android Apps
 - Material UI/UX
 - o Gradle Build System
- Independent Coursework from Udacity based on Scalable Web Apps in Python, Java
- Independent Coursework from Udacity based on Developing Offline First Apps
- Currently taking a Rails Developer Degree hosted by John Hopkins University (3 of 5)
- Udacity as a Secondary Source for Modern Android Development. (besides Doc Reference)