Luv Agarwal

Professional Experience

2016 Dec - **Software Developer**, *GoLive*, Hyderabad.

- An intelligence engine for answering general to very specific analytics questions.
- Recommendation engine.
- A high performance web UI using ReactJS.

2014 Sep-Nov **Software Developer**, *Imaginate*, Hyderabad.

- o Implemented major components of back end using Django.
- o Database optimization, tracking system and an interactive analytics dashboard.

2015 July-Sep Software Developer, Connaizen, Remote.

- Responsible for building interactive analytics dashboard with charts, graphs and ajax powered reports.
- Extended existing REST API and integrated the calls with analytics dashboard.

2015-2016 **Open Source**.

- o Mozilla 10 patches submitted, 32 comments made, 3 bugs filed, 11 bugs poked.
- o GreenNav webapp, maps, api made 17 commits.
- o SymPy 3 patches submitted.

2015 Aug - . Researcher, CSTAR, IIIT-Hyderabad.

- Working on Retrieving and Routing Quantum Information in a Quantum Network using non-maximally entangled states.
- Analyzed patterns for state variation while traversing the network.

Projects

2016 Feb-Apr Dialog Engine, Prof. Vasudeva Varma.

A bot designed to understand and respond to e-commerce products related enquiry questions. Built query classification and response system, and a website with back-end in Flask.

2016 Wikipedia Search Engine, Prof. Vasudeva Varma.

Built a search engine on complete Wikipedia Data dump with fast search. Optimized index using various techniques and data-structures including inverted index.

2015-2016 *Machine Learning Algorithms*.

Implemented various machine learning algorithms including Neural Networks, SVM, Linear regressor/classifier, PCA, LDA, Decision Tree, Markov Localization and Kalman filter. Hands on experience with deep-learning frameworks.

2015-2016 Music Recommendation System.

Implemented item based collaborative filtering with multiple similarity measures.

2016 Fruit Ninja.

Built a web clone for a famous Android game named Fruit Ninja. Game is multiplatform, built using PixiJS, ES6 with fairly complex animations.

2015 Sep-Nov *C Shell*.

Linux shell written in C with support for piping, redirection and background execution.

2016 Proxy Server.

Developed a lightweight http proxy server in Python.

2016 Terrorist Detection.

Implemented paper titled "Computing Optimal Monitoring Strategy for Detecting Terrorist Plots" using Python and CPLEX library.

2015-2016 Linux Time Tracker.

Linux shell based tracker with hierarchical classifiers, whatsapp forwarding and real-time notifications using Python, Bash, Linux run-levels and lock unlock routines.

2016 **Ubiquitous Hunt**.

A Linux shell utility which eliminates the need to pass complete paths in linux shell commands built using shell scripting.

2014 Carrom OpenGL.

Implemented a customizable 2 player carrom game in OpenGL.

Skills

Proficient Python, Javascript, Django, Django Rest Framework, Linux, Git/Hg, PIXI.js, NoSQL, MySQL, C, C++, Typescript

Intermediate Bash scripting, PHP, HTML5, CSS, Google Polymer, React, Redux, Flask, OpenGL, PostgreSQL, MongoDB, NumPy, Sklearn, Matlab

Education

2013–2018 B-tech in Computer Science + MS in Computational Natural Sciences, ///T Hyderabad.

Achievements, Extra Curricular Activities

- First position and only coder to complete all three questions in Microsoft coding contest.
- Teaching volunteer at Ashakiran
- \circ Scored 247/360 in AIEEE, India's one of the most prestigious exam (Top < 0.5%)