Teja Surya NANDIKATLA

+91 9654938692, tejasurya1729@gmail.com

EDUCATION

YEAR	DEGREE / EXAM	INSTITUTE	GPA
2017	B.Tech in Engineering Physics	Indian Institute of Technology, Delhi	5.55
2013	Board of Intermediate Education,AP	Bhashyam Junior College	95.2%
2011	Board of SSC, Andhra Pradesh	Bhashyam Public School	91.1%

INTERNSHIP

SUMMER 2016
MAY-JULY

Web Developer at EKO INDIA FINANCIAL SERVICES, Gurgaon

Development of Money Transfer Web Application

Developed Money Transfer Web Application based on **Django** and used frameworks like **Gumby**, **Bootstrap** for UI elements, **knockout.js** for JavaScript Implementation, **jinja2** as Template Engine

Integrated company's remittance APIs in project modules enhancing security of transaction. Used **MySQL** database to store agent details, user data.

Project is open-sourced at https://github.com/EkoHub/Money-Transfer-Web-Applicaton

Login Page Design

Created **OAuth** based responsive Login page for companys's Developer portal in **node.js**

Integrated Sign-In buttons of Facebook, Google, LinkedIn and stored user's data in **MongoDB** database

PROJECTS

SPRING 2016

Android App for Course Management | Supervisor: Dr. Vinay J Rebeiro

Designed front-end for course management app with features like notifications, threads, comments. Integrated locally deployed **web2py** server APIs and used **volley** for network communication

Android App for Institute Complaints | Supervisor: Dr. Vinay J Rebeiro

Designed and Developed Complaint Management App using web2py python framework for the backend. Created APIs with web2py. UI is personalized w.r.t Students, Hostel-Warden, Dean, Worker with additional functionalities like comment, vote for a comment, status of complaint

Networked Multiplayer Desktop Game | Supervisor: Dr. Vinay J Rebeiro

Designed and Developed multiplayer ping pong game using **UDP Socket Programming** for network communication and **Java's Swing** library for UI. Used **Interpolation, Extrapolation** and **Lag Compensation** techniques to ensure smooth flow of the game and Artificial Intelligence for CPU bot to play against human players

FALL 2015

Mobile Phone Tracking System | Supervisor: Dr. Amitabha Bagchi

Multithreaded Implementation of hierarchical call routing structure in **Java** where each node is a set of mobile phones registered in that Base Station(leaf nodes) or Exchange Area(internal nodes). Implementation creates one thread for each mobile phone and one thread for central server which maintains routing map tree

Search Engine Implementation | Supervisor: Dr. Amitabha Bagchi

Built a simple search engine based on **Inverted Index** data structure in java and Relevance(Scoring function) is chosen as sum of squares of inverses of query word positions in a webpage. Search Engine can give results with *AND*, *OR*, *PHRASE* queries

DEC 2015-
APR 2016

Bell Inequality | Supervisor Prof. V RaviShankar

Studied Bell's research paper **"On Einstein, Podolsky, Rosen Paradox"** for two particle entanglement and formulated an inequality for three particle entanglement. Also proved it for GHZ state

B.Tech Thesis

Fall 2016	**Teleportation in higher dimensions** | Supervisor : Prof. V Ravishankar Designed Quantum circuit for teleporting any n-level system using generalized **Quantum Fourier Transform** gates without any loss of probability through EPR and classical channels. Though circuit presented by *Bennett et. al* for single qubit teleportation which by replication can only teleport 2^n-level system

Scholastic Achievements

Selection at ISI	Selected for **Bachelor of Mathematics** Programme at **Indian Statistical Institute**, Bangalore in 2013
Maths Olympiad	Secured **State 2nd** rank in Kennedy Maths Olympiad twice during 2008-09 and 2006-07

Technical Skills

Programming Languages	Java, Javascript, C++, Python, Bash
Web Development	Django, node.js, Knockout.js, Bootstrap
Databases	MongoDB, MySQL
Others	Linux/Ubuntu, LaTeX, Android Studio, Eclipse, LabView

Courses

Computer Science	Data Structures and Algorithms, Design Practices(Android app and Desktop game Development), Intro to Computer Science
Mathematics	Probability and Stochastic Processes, Linear Algebra, Calculus
Electrical	Digital Electronics, Signals and Systems, Intro to Electrical Engg.
Physics	Mathematical Physics, Classical Mechanics and Special Theory of Relativity, Spintronics, Quantum Mechanics
Online	Introduction to Linux, *edX*

Interests and Activities

Competitive Programming, Developing DIY things, Basic Computer Hacks
Cricket, Sitcoms, Vintage Hollywood Movies