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California

## 2.5 YoE | Research Engineering | Software Developer with focus on Full Stack Projects

Linkedin Github Gitlab Portfolio GoogleScholar vCard CantechSoftwares

### **Work Experience**

# Research Assitant, College of Engineering, CSULB, California

From June 2023

- Conducted in-depth literature review of 20+ papers on self-adaptive robotic arm specifications.
- Formalized models for multi-robotic arm with 9 DOF configurations and performed analysis with UPPAL.
- Authored paper submitted for acceptance at QRS 2023 conference.

## Software Developer, Trade India Infocom LTD, Noida

From Dec 2021 to Jan 2023

- Developed and maintained TradeIndia's Backend Development and CRM Portal.
- Managed PostgreSQL databases, optimized complex gueries, and improved data access efficiency by 30% for databases with 5+ million registered users.
- Collaborated with internal and external teams on Django to FAST-API integration, enhancing efficiency and effectiveness.
- Designed pipelined, and deployed backend APIs from the ground up using FAST-API on GCP and AWS platforms.
- Assisted in migrating projects to microservices architecture, improving system and reducing latency by 20%.
- Established CI/CD pipeline automating testing, security, and hot reload deployments achieving 79% code coverage with 1500+ unittest cases.

### Software Developer, Fella Feeds, Gurugram

## From Aug 2021 To Dec 2021

- Developed scalable backend APIs using Django Rest Framework serving 5 mobile applications with over 100K+ active users.
- Architected RESTful APIs and WebSocket integrations for real-time appointment booking apps like Doc On Call and TraceLyf achieving <100ms response times at peak traffic.
- Proficient in REST API creation, pipeline setup, and backend architecture design.
- Designed PostgreSQL and Redis-cached database architecture optimized for workloads handling 5000+ concurrent requests.

### FullSTack Developer, SBNRI, Gurugram

From Jan 2021 To Aug 2021

- Developed and maintained 3 key SBNRI projects: SBNRI web app, SBNRI blog project, and SBNRI Backend APIs.
- Created the SBNRI Full-Stack web application from scratch using Django Framework.
- Automated form filling, built OCR Model to extract features from passport to autofill data to multiple forms
- Launched responsive SBNRI website with 5K monthly visitors, from idea to launch in 3 months using Django, jQuery, Bootstrap.
- Maintained and enhanced modules for the SBNRI blog project( Wordpress Based Front-end), Reducing loading time by 2X through front-end optimization of 15+ modules.
- Built REST APIs in Django Rest Framework for SBNRI mobile app, enabling mobile access for 3000+ users

### FullStack Developer Intern, Uptimus Datalogix, Delhi

From Aug 2020 To Dec 2020

- Built front end UIs for internal ERP system using PHP and Laravel Framework.
- Contributed to the development of an internal team management application for Ezeepay by implementing CRUD operations using PHP, automating report generation saving 2 hours per week for managers.

#### **Education**

#### Master of Science in Computer Science, California State University, Long Beach, California Jan 2023-Dec 2024

- Specializing in Advance Software Engineering and Advance Artificial Intelligence advised by Dr. Abdul Basit.
- Coursework: Advance Computer Architecture, Software Verification and testing, Advance Algorithms, Programming Languages.
- Learning: Contributed in 4 Research papers, High-Performance Computer Architecture, Software testing, MLops, ML,CNN, RNN.

## Bachelors Of Technology Computer Science, Jamia Hamdard, Delhi

Aug 2017-May 2021

- Did Major project under supervision of Dr. Jawed Ahmed, contributed in Real world CNN application, Link.
- Coursework: Advance Mathematics, Linux based systems, Java Spring, DBMS Systems, AI, Systems engineering, DevOps.

### **Selected Research**

Formal Modeling and Verification of Industrial Robotic Arm - A Case Study

QRS 2023

Performance Analysis of Cache Size and Set-Associativity Using gem5

**CSULB 2023** 

Face Mask Detection Model for Covid-19 Using CNN & DL Models

JHU 2021

## **Technical Skills**

Programming Languages, Frameworks - Python, C++, C, Java, PHP, Django, FastAPI, Laravel, Wordpress, DRFk, Flask

Front-End -HTML, CSS, Javascript, Ajax, Jauery, Angular, React

Postgres, SQL, SQLite, Elastic Search, Kibana, NoSQL, MongoDB, DBMS Databases -

**DevOPS & Version Control and Editor-**Heroku, AWS, Docker, PythonAnywhere, CPanel, GCP, Git, Vim, VSCode

## GitHub link- https://github.com/ilmaan

- SLR Using CNN, LSTM and Google Mediapipe
- Research Proposal to compare results between 2 DL models

Bug Tracking Application

- bug tracking application built with Django

• People Solution Services

- Online Grievance Reporting Portal

Stock Price Prediction

- Custom Stock Price prediction using auto-arima, generating output with 66% accuracy

#### Skills:

Unit Testing, Full-Stack, Microservices, Numpy, Pandas, Statistics, ETL, Matplotlib, Seaborn, Plotly, Machine Learning, MS Excel, Jira, Bitbucket, Docker, Kubernetes, Shell, Tunnelling, Agile Methodology, MVC, MVT, SCRUM, KABANA, Waterfall, RESTful API, AWS CDK, Lambda, Azure, GCP, Distributed Systems, Big Data Analytics, Graph Algorithms, Multithreading