

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**

- CSULB Student Summer Research Award (2024).
- 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 at QRS 2023 conference.

Software Developer, Trade India Infocom LTD , Noida**From Dec 2021 to Jan 2023**

- 2022 TradeIndia Hackathon Runner-up. Improved Customer end design, resulting improved customer end efficiency to manage and update product orders.
- Developed and maintained TradeIndia's Backend Development and CRM Portal.
- Managed PostgreSQL databases, optimized complex queries, 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.
- 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

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| • 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

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|----------------------------------------------------|------------------------------------------------------------------------------|
| • Programming Languages, Frameworks - | Python, C++,C, R, Java, PHP, Django, FastAPI, Laravel, Wordpress, DRF, Flask |
| • Front-End - | HTML, CSS, Javascript, Ajax, JQuery, Angular, React |
| • Databases - | Postgres, SQL, SQLite, Elastic Search, Kibana, NoSQL, MongoDB, DBMS |
| • DevOPS & Version Control and Editor - | Heroku, AWS, Docker, PythonAnywhere, CPanel, GCP, Git, Vim, VSCode |
| • Data Visualization - | Tableau, Excel, Power BI, SQL, Google Analytics |

Projects [GitHub link- https://github.com/ilmaan](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